Clinical Lecture
ON
ERYSIPELAS.

BY PROFESSOR HUMPHRY, F.R.S.

THE following cases, which are or have recently been in Addenbrooke's Hospital, Cambridge, present some points of interest.

Case 1 was that of a middle-aged, healthy woman, who had been engaged in a neighbouring town in washing the linen of a family in which there were two severe cases of erysipelas, and amongst the linen were rags from the patients. One day she grazed her right thumb in breaking sticks to light a fire, and washed the rags from the erysipelas cases that afternoon. During the night the thumb became uneasy and swollen, and three days afterwards (on Dec. 27th) she was admitted into the hospital with some swelling of the thumb, and swelling on the palmar aspect of the forearm, with deep fluctuation, indicating the presence of matter in the loose tissue about the flexor tendons. An incision gave vent to the matter, which extended a good way up the forearm, and which for a day or two did not escape very freely, owing to the opening being plugged rather too tightly with oil-silk. This difficulty ceased on the withdrawal of the plug. There was, therefore, thus far nothing remarkable about the case, though, like others of its kind, it suggested the question as to the cause of that association of deep-seated cellulitis of the forearm with superficial wounds of the hand which is so frequently observed, and which is due, I think, not so much to the extension of inflammation along the tendons as to the spread of morbific matter through the connective tissue of the palm to the loose areolar structure above the annular ligament, where suppuration is easily excited, as it is in other parts where there is similar tissue, and which is probably dependent upon the relation of that tissue to the lymphatic system. There had been no erysipelas in the hospital for several months at this time; but a few days afterwards it showed itself in the thigh of a girl (Case 2) lying in the next bed to Case 1, and a few days later it appeared in the leg of an elderly woman (Case 3) lying in a more distant bed in the same ward on account of an ulcer behind the internal malleolus. The two last-named patients (Cases 2 and 3) were stated to have both had previous attacks of erysipelas. Cases 1, 2, and 3 were removed to a distant and separate ward for isolation; and there was no further manifestation of the disease in the ward from which they were removed. Cases 2 and 3 were slight, the constitutional symptoms not being severe or the rise of temperature great; and the local affection subsided without extending over the whole of the limb in either case. Case 1, who had been placed, as I just said, in the separate ward with Cases 2 and 3, was going on well; but as the fingers were becoming bent I was anxious to take early steps to prevent this very troublesome and frequent ill-consequence, and directed slight and gentle extension to be maintained by means of a splint upon the back of the forearm and hand. This was perhaps done rather prematurely. It gave some pain, and in two days erysipelas appeared about the wound in the forearm and spread up the limb. The rise of temperature and other general symptoms were not severe, and the eruption soon subsided.

The interesting question arises here, Was the erysipelas in Cases 2 and 3 communicated from the cellulitis patient (Case 1)? That is to say, was the cellulitis in Case 1 caused by the erysipelas-poison introduced through the scratch on the thumb, and did the poison spread from this and induce the ordinary cutaneous erysipelas in Cases 2 and 3? This must, I think, remain an open question, to be determined by the observation of other cases of the like kind. The opinion is held by many that cellulitis—not merely the ordinary subcutaneous cellulitis (phlegmonous erysipelas, as it is often called), but deep cellulitis—is not unfrequently of an erysipelatous nature, and is induced, as we may suppose it to have been in Case 1, by the poison of erysipelas; and if that be so, we might expect that it would in turn sometimes be a centre from which ordinary erysipelas might spread. In favour of this view, it is to be observed that the affection first showed itself in the girl lying in the next bed, subsequently in a patient at a greater distance, that there had been no previous cases in the hospital, and that there was no further appearance of the malady in the ward after these three cases were removed. On the other hand, it is to be observed that about this time there were cases of erysipelas in the neighbourhood; and after its occurrence in those I have mentioned there were two cases in another ward of the hospital. In what manner it was communicated to these last I cannot tell. Further, ordinary erysipelas subsequently developed itself in Case 1. I do not know that this is conclusive, for, as we know, persons who have had erysipelas are prone to further attacks of the same malady. Indeed, both Cases 2 and 3 appear to have been thus predisposed. Moreover, it might have been an extension, from the cellulitis to the skin, of the poison roused into greater activity by the effort to extend the fingers.

This liability to recurrence observed in Cases 2 and 3 constitutes a notable feature of difference between erysipelas and the other contagious exanthemata, in which class erysipelas is sometimes ranked—indeed, between it and most other contagious maladies. While the other maladies leave an impress on the system which is a bar to their recurrence, the alteration produced by it rather favours its return. Herein it partakes of the quality of many inflammatory diseases, the occurrence of which renders the part or the system prone to their return. A person who has had bronchitis, for instance, is likely to suffer repetitions of the same, and each, perhaps, more severe than its predecessor. In erysipelas, however, this last does not seem to be the case, the subsequent attacks not being commonly more severe than the earlier ones. The impress left upon the skin by erysipelas is not infrequently of long duration, evincing itself in tenderness, in hyper-sensitiveness to cold and heat, and, especially in the face, in tendency to recurrence of vascular congestion and slight œdema; and some remnant of this may be assumed to be the cause of the tendency to recurrence of the disease, especially as it most often recurs in a part previously attacked. For a time after the attack, it is true, this altered condition proves a security against the return of the disease, inasmuch as the erysipelas leaves its first habitat, spreads to pastures new, and rarely harks back again. The protective influence, however, after a time wears out and leaves the part in a worse state than at first; more liable, that is, to recurrence of the malady. The same is the case with many maladies. A common cold is an example: the immediately ensuing effect is protective against recurrence; the later effect gives liability to recurrence. In the ordinary exanthemata, which I have mentioned, and some other diseases the protective influence is more enduring; not unfrequently, indeed, it does not wholly wear away throughout the life of the individual.

Erysipelas also differs from the ordinary contagious exanthemata in that, whether there be a preliminary blood-infecting incubation-period or not, it commences at some part usually where there is a solution of continuity in the skin, and where probably the poison was introduced, radiates from that part to a variable distance, and then ceases to spread further. The cause of its thus ceasing to advance is as mysterious as that of its commencement, or more so. One might have thought that its power of invading new territory would be proportionate to its area and the extent of its circumference—that the space covered by it, in short, would represent force to cover more space; but it seems that the forces in this and many other diseases, whatever may be their nature, resemble the normal living forces in each organism in having only a limited duration, the period of which varies with the force of the disease on the one side, and on the other with that of the force of the body to resist it. In the initial stage of a disease the force of both is greatest; that of the body is, indeed, commonly sufficient to bar the manifestation—the occurrence of the first stage, that is, of the many diseases which surround it. As a disease goes on, the force both of it and of the body lessen, and the question of decline of one or the other depends upon the relative enduring power of the two. In the case of erysipelas, that of the body, though much depressed at first, usually gains the day, and the termination is favourable. Herein is the key to rational treatment—namely, to destroy or lower the one force, and to increase the other. Unfortunately in erysipelas, as in so

many diseases, we have at present no sure direct destroying agent—no positive cure; that is, we know of no specific, no decided antidote to the malady. Scarcely can we even directly mitigate its force. Something, it is true, we may do by shielding the part from irritating influences, such as exposures to air, to cold, or to heat, and by appliances which may exert a soothing or astringing influence upon the disordered nervous and vascular apparatus. Many are the applications which have been recommended with these objects, and they are variously esteemed by different persons, and seem to vary in their influence in different cases according apparently as the vascular or the nervous symptoms predominate. I have tried many, warm and cold, dry and moist, such as poppy fomentation, lead lotion, flour, cotton wool, besides paint, collodion, and nitrate of silver, with variable effect. The last-named substance has been vaunted more than any other for its influence in arresting erysipelas; but I do not remember to have found it distinctly to do so in whatever way applied, whether in the solid form or in solution in water or nitrous ether. The erysipelas has in most cases disregarded it and gone on its way. This is, I believe, the experience of most persons who have tried the nitrate of silver. Seeing, then, that we have no local antidote, our resources are in the main limited to the means which may seem best suited to enable the system to bear up against and resist the progress of the malady, and which must be adapted to the requirements of each particular case. General depression—a sense of sinking—is a common and marked feature, and the preparations of iron, especially the tinctura ferri perchloridi, in rather large doses, are, and I think deservedly, most in favour. By some the preparation last mentioned is regarded as a "specific," but I do not think you will find it to be so. Nutritious diet, so far as the patient can take it, and wine, are in most cases indicated; but the tendency in this respect at the present time is, I think, rather to overburden the stomach, and so to prevent the proper digestion and appropriation of the food which is taken, and, indeed, thus further to depress the patient. The condition which seems most of all to favour the occurrence of erysipelas and to render the system unable to resist its progress is that which is associated with the presence of albumen in the urine. Under these circumstances the case is watched with much anxiety, and all expedients used which may be likely to maintain strength and stay the advance of the eruption. In no one of the three cases which I have mentioned was this symptom present, and I do not think it is often observed in those whose previous attacks of erysipelas have predisposed to a recurrence of the eruption.

While these three cases were under care, a girl (Case 4) was admitted with erysipelas of the face, which was attributed to exposure to the cold north-east wind three days previously. She felt her face cold and smarting when she was out, had a restless night, and next day the eyelids began to swell. She was a healthy girl; had little constitutional disturbance; was kept in bed; the redness did not spread beyond the face, and subsided without any further treatment. The case illustrates another not unfrequent exciting cause—viz., cold wind; also the part—the delicate skin of the eyelids and bridge of the nose—which, more than any other part, is liable to be attacked unless the locality be determined by the presence of a wound. From this it is wont to spread over the face, ears, and neck, and, more reluctantly, over the tougher tissue of the scalp. It is also an example of a large class of cases in which rest and freedom from exposure are sufficient to restore the health-balance, enabling the nutritive forces to hold their own and to regain the lost ground without the aid of medicine. When this is so, it is well to let nature have her perfect way without interference, and to wait for halting or imperfection in her processes before we presume to intrude with the administration of drugs.

Some of the fluid removed from a vesicle on the face in this case showed small oval micrococci. Bodies of this kind, as is known, have in several instances been found in erysipelas, and the cultivated products of them have induced by inoculation this disease in animals, and also in the human subject in cases in which it has been tried because there was reason to think that an attack of erysipelas would have a beneficial effect in arresting or removing a local affection. This reminds me that in Case 3 the effect of the erysipelatous attack in promoting the healing of the ulcer and the removal of the surrounding induration was very marked, and this good influence has repeatedly been observed by myself and others. Now in the case which we are considering (Case 4) the affection was clearly attributable to the influence of the cold wind. Whence, then, the micrococci? Were they in the wind and blown by it into the cuticle of a skin which was fertile for them, or were they a product of the tissue stimulated to activity by the conditions which the malady induced? This opens up a large and important question applicable to many diseases, and which it will take much investigation fully to solve. In the case of erysipelas, and in certain other contagious or infectious diseases, there is clearly something communicated from one affected person which engenders the disease in another; and that something would seem most probably to be of the nature of a micro-organism. In some diseases, as measles, scarlatina, and small-pox, it seems in the first instance to enter into and breed in the blood-mass; whereas in erysipelas it appears to affix itself and propagate in some part of the cutaneous or subcutaneous tissue. If this be so, we might hope for the cure in some germicide that would destroy it. With this view I have applied on the limb, in some cases in which it could be done, a strong solution of bichloride of mercury—1 part to 100; a rag soaked in this being applied round the limb over, and for three or four inches beyond, the spreading margin, and covered with oil-silk. This soon caused redness and some vesication over the area to which it was applied. It is difficult to distinguish the redness thus produced from that of the erysipelas; but the erysipelas did not extend beyond it, above or below, in any of the three cases in which it was used. They were all mild cases with slight constitutional disturbance; and it is probable that had the affection been more severe it would not have been thus limited. The bichloride may act in one, or both, of two ways: first, by exciting an inflammatory condition of its own in the skin, which may be a bar to the spread of the inflammatory condition of erysipelas; and, secondly, by its germicidal action. It will be objected to the latter view that the property of the bichloride to coagulate albuminoids, evincing itself in the deeper layers of the cuticle, will prevent its ever reaching the cutis, and that it cannot, therefore, exert any influence upon the tissues and fluids of the skin, and, *a fortiori*, cannot enter into and produce any effect upon the system. Certainly the latter was not evinced in any of the cases in which I have seen it used in the manner I am describing. It is, however, quite clear that it does excite an inflammatory state of the skin; and it may therefore induce other effects in it. At any rate, it seems that this or other agents of the like kind are worth a trial.

Lumleian Lectures

ON

THE TONGUE AS AN INDICATION OF DISEASE.

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LECTURE I.

MR. PRESIDENT AND GENTLEMEN,—The knowledge which enables many a practical physician to make the tongue an index of diagnosis, treatment, and prognosis is for the most part unwritten. It has been handed down to us as part of the tradition of the elders, and few attempts have been made to analyse or educe laws from the accumulation of experience of which it consists. The labour which has been bestowed upon the pulse is in remarkable contrast with the neglect which in recent times has been the lot of the tongue. "Various and full of meaning," says a great writer, one whose words must ever be received with reverence within these walls, "are the conditions and appearances presented by the tongue. A patient would think you careless or ignorant of your craft

if you did not at each visit look at his tongue as well as feel his pulse." But of late the tendency in this matter has been to agnosticism; it has become the habit with many, and those not the least influential, to look upon the changes which this organ displays as of less and less importance, to regard them as accidental rather than essential, as the results of unimportant local conditions rather than as inseparably connected with constitutional disturbances. "The tongue," said a great surgeon in my hearing, "belongs to the mouth in the first place, and to the general system only in the second." I should have put the general system first; but I will not anticipate my conclusions.

I am about to examine the subject with a fresh appeal to nature, and, putting aside for the present both ancient faith and modern scepticism, shall be content simply to collect the evidence of the wards and the dead-house, and let the tongue speak for itself. This is simple in theory, but in practice complicated, as will become sufficiently apparent, and on this ground I ask not only the indulgence but the patience of those who honour me by attending. It is not my purpose to deal with ailments local to the organ, but only with those changes which have their origin outside it, or belong to the system at large. I look at the tongue as a physician, not as a surgeon, and regard it as symptomatic of disease rather than as the seat of it. My first endeavour has been to make a trustworthy and usable classification. Many terms have been hitherto applied vaguely and in confusion; tongues have been described as *furred*, *coated*, or *dirty* almost indiscriminately, while there has been too often a failure to attach due importance to such signs as dryness and nakedness. To secure a working classification I prepared hardened microscopic sections of a number of tongues of many kinds (they amounted to 104), and made with the help of the camera lucida the outlines of them which are now before the College. I was thus enabled to associate the minute and intimate changes with the appearances presented during life to the naked eye. Taking together both naked-eye and microscopic appearances, I arranged the series into what, if I may borrow from the botanists, I may call *natural orders*, using as guides chiefly such characters as appeared on minute examination to be important, and which at the same time were distinguishable with the naked eye during life. It is sufficiently evident that no sub-division excepting one connected with characters evident to common sight could have any practical utility. Thus the classification, though made with the help of the microscope, can be applied without it. It might have been more accurate in some respects, more satisfying to the votary of pure science, could I have relied only on minute anatomy; for there are some changes, especially one—increase of the deep epithelium,—which are not easy to be recognised without the use of microscopic sections. I may say more of this hereafter; putting it aside for the present, I have made a classification which I think will work in practice, in which the minute and essential particulars are conveniently bound up with obvious external characters. The amount and distribution of the superficial or horny epithelium is important, since this essentially constitutes the white covering which is so noticeable during life. Other characteristics are—the elongation of the papillæ; the presence of incrustation, by which the proper surface of the organ is concealed; loss or attenuation of the epithelial layers, by which the surface becomes red, bare, or raw; and the quality of dryness: this last is of great importance, and it may be added that it is recognisable only with the naked eye.

The classification may be thus sketched. First comes the condition of health; rather a variable standard—an average state, rather than an absolute one. Next come the stages of addition; then those of subtraction. In the stages of addition, the epithelium increases more and more, and finally acquires a superstructure, largely composed of foreign material. This is the maximum of clothing; it is succeeded by a process of divesture, under which the tongue may become not only naked but flayed.

In detail, the first stage is where the papillæ are separately capped with a minute white patch, which consists mainly of horny epithelium; this tongue I call *stippled* or *dotted*. As the covering increases, the spots coalesce, cease to be discrete, and become confluent, or at least appear so to the naked eye. To this degree the term *coated* is applied, as indicating continuity. The increased growths on the papillæ form the larger proportion of the surface; the intervals are more or less filled up by the deeper variety of epithelium and adventitious matters. The coat attains its highest development in what may be conveniently designated as the *plastered tongue*, of which the covering is thick, uniform and conspicuous, and often looks as if laid on with a trowel. The term *furred* is restricted to another acquirement—elongation of the papillæ, which remain separate from each other, at least at their extremities, so as to give a shaggy look, or one suggestive of coarse hair or fur. The last stage of increase, one which may succeed upon the furred tongue, or ensue without its intervention upon the coated or plastered, is where the papillæ are concealed by an incrustation, usually dark and dry, by which the surface is overlaid. From this, as the climax of addition, the scale descends through processes of subtraction. The accumulation comes off to expose either a normal surface or one which is imperfect; the former generally when the crust shelves off gradually, the latter when it breaks away abruptly. Irrespective of the formation and removal of crust, there are other modes of waste and defective growth by which the surface of the tongue is swept clean, and its coverings attenuated or even abolished in parts, so that these become absolutely skinless. We now have the several forms of the red, denuded, and raw tongue, and with these the scale finishes.

Classification of Tongues.

Naked Eye.	*Microscopic Description.*
1. Healthy. Moist.	White epithelium in small amount on papillæ, not continuous or superabundant.
2. Stippled. Moist. Dotted with white.	Excess of white epithelium on papillæ, not extending between them.
2 (D). Stippled. Dry.	Ditto.
3. Stippled and coated. Coat continuous in parts. Moist.	White epithelium on papillæ in excess, with partial filling of intervals.
3 (D). Stippled and coated. Dry.	Ditto.
4. Coated white. Moist. Coat continuous.	Excess of white epithelium on papillæ. Intervals more or less filled up with epithelium and accidental matters.
4 (D). Coated white. Dry. Coat continuous.	Ditto.
5. Strawberry. Coated and injected, especially showing in fungiform papillæ.	Like the coated or plastered, but with more injection.
6. White, plastered. Thick uniform coat, abrupt and striking.	More elongation of papillæ than with coated tongue, more filling of intervals, with superficial accumulation.
7. Furred or shaggy. Moist. Greatly elongated papillæ.	Extravagantly long papillæ, mostly of horny epithelium.
7 (D). Furred or shaggy. Dry.	Ditto.
8. Encrusted, dry, brown. Thick felted dry coat over papillæ.	Continuous crust on and between papillæ, largely of parasitic matters.
9. Furred or encrusted, becoming bare. Generally dry.	Crust breaking away, together with more or less of normal surface.
10. Denuded. Red. Absence of normal covering.	General absence of all epithelium excepting the Malpighian layer; sometimes of that also.
11. Red. Moist. Dry membranous covering.	Level membrane replacing epithelial processes.
12. Cyanosed.	Injected; hypernucleated; excess of deep epithelium.

Before dealing with these classes individually, I will say a word about the plan I propose to follow. I shall first describe each variety of tongue, and then mention the clinical conditions which have been found with it. With this in view, I have made a habit of arranging cases which have come before me in a tabular form, according to the state of the tongue, annexing at the same time other details. As I must content myself with producing only abstracts of these tables, I may say that the particulars systematically noted were: the disease and its duration; the general state as to strength, prostration, and consciousness; the temperature of the body; the arrangements as to food and drink; observations relating to the bowels and stomach, to the nervous system, to respiration with regard to the mouth and nose; the presence of morbid discharges by diarrhœa, diuresis, or suppuration; the amount of the saliva, and the moisture or dryness of the mouth. My performances in this matter have fallen short of my intentions. I had hoped to have made a complete compendium of hospital practice; but many cases, chiefly the less important, have escaped notice, so that my tables include only 366 cases; these must be taken as a sample of hospital experience rather than as hospital experience in bulk. They do not fairly show the relative frequency of each kind of tongue, for the more

trivial were more often omitted than those which were striking or considered interesting; but they show, I believe correctly as far as they go, the kinds of disease associated with each. However inadequate, I think these records will be of use, helped out as they must be with a larger amount of unrecorded observation. Having described each tongue with its environment of disease, I shall next regard the association from the other point of view, and, taking a few typical diseases and constitutional states, shall show with what varieties of tongues they are accompanied. Finally, I shall draw together such general conclusions and rules of practice as the foregoing details appear to warrant.

I will now proceed to describe the healthy surface of the tongue so far as is necessary for the purpose in view.

CLASS 1.—*Healthy Tongue.*

The healthy condition of the tongue is by no means easy to limit or define. Not only does it change its aspect and character with often inconsiderable deviations from ordinary health, but it presents many differences within this state in different persons and in the same persons at different times. There are congenital varieties in the number and prominence of the papillæ, and there are such habitual differences, whether congenital or acquired, in the amount of epithelium, that to some persons it is normal to have a clean tongue, to others not less normal to have a coated one. Thus, whether the tongue be looked at with the naked eye or with the microscope, the range of health is wide; the same degree of coating may be normal in one person and abnormal in another, so that it is impossible to set up an exact ideal and say that all departures from it are the results of disease. Nevertheless, some broad outlines may be adventured outside which pathology begins.

The shape, colour, and general appearance of the tongue in health are so well known that it is only necessary briefly to indicate what must be held to be consistent and what inconsistent with this condition. The shape is not too broad or the end too blunt, as with the flabby tongue of anæmia, of depression after alcoholic excess, and of many other asthenic conditions; nor is it indented with the teeth; nor is it narrowed and sharply pointed, as it is said to be chiefly with acute febrile and inflammatory states. The tongue should be protruded steadily and kept still, neither jerky nor tremulous. In colour it should present a basis or substratum of delicate pink, in which the forms of the papillæ are distinguishable by their shape, but not by hyperæmia or injection, which conditions are conspicuous in many disorders, notably in scarlatina, as the chief characteristic of the strawberry tongue. The surface may be nearly clean or uncovered, but more commonly presents a superstratum which has been termed *fur* or *coating*, to the amount and character of which much importance has been attached. In ideal healthiness this is no more than a delicate white sprinkling or stippling, which may be likened to hoar-frost, a little speck lying as a cap or summit to each of the filiform papillæ, their extent not being enough to conceal but only to modify the general effect of the colour below. The filiform papillæ are more constantly coated than the fungiform; the circumvallate seldom. But this covering, even in perfect health, is not always, even not often, so limited. Sometimes it stretches between the papillæ, partially fills up the intervals between them, and spreads more abundantly on the central and back parts than at the sides or tip. The coat is nowhere excessively thick, nor enough quite to conceal the configuration of the surface; it thins gradually without abrupt demarcation; it is not absolutely white, but is greyish where thin, yellowish where thick; the proper tissue, where exposed, is not of a bright but a dull pink, not exaggerated by injection, so that no striking contrasts of white and red are noticeable. The tongue and inside of the mouth are moist. Saliva can be voluntarily collected and spat out; it can be made to issue freely through a cannula in the parotid duct by placing a little acetic acid on the tongue.

To obtain an idea of the minute and essential changes which give rise to the altered appearances presented to the naked eye, it is not enough—it is, indeed, misleading—to be content with scraping the surface. It is needful to secure sections which show everything down to the muscular tissue; the amount, nature, and disposition of the epithelial investment must receive attention in its whole thickness, as well as the state of the corium with regard to injection, nucleation, and extravasation; and the characters of both apart from disease must be indicated. As the purpose is clinical, it will be enough to describe the upper surface, where what may be called the symptomatic changes are mainly observed.

Starting from within, and using the terms descriptive of the skin, which the covering of the tongue much resembles, we come first to the cutis vera, or corium, a layer of dense connective tissue between the muscular tissue and the epithelial. Projections from this form the central parts of the papillæ. The injection and nucleation of the corium are its chief points of morbid interest. The nucleation varies much, even in health; it is most abundant within the papillæ and near the surface. Upon the corium is the epidermis, of which there are three layers, the deepest, or rete Malpighii; upon this a stratum composed of lozenge-shaped nucleated cells, which correspond, with a difference, to the corneum of the skin; and upon this a horny formation which is special to the tongue, and chiefly forms the white coat.

To take these separately, the rete Malpighii presents in contact with the corium a compact arrangement of columnar cells, in health little more than a single course, which are distinguishable, though not abruptly, from a bulky collection of polygonal cells which complete the Malpighian layer. Towards the surface these cells elongate and flatten, still remaining nucleated, and with rather a quick transition become squamous and form a layer which varies much in different circumstances, by which the surface of the tongue is generally covered. This corresponds with the corneum of the skin, though in the tongue, unlike what happens in the skin, the cells retain their nuclei. On the prominent parts, where the growth is oldest, notably on the ends of the papillæ, the cells undergo a further change, losing their nuclei and cellular form and becoming fibrous, losing their power of staining with carmine, but greedily absorbing the aniline dyes. It is this horny epithelium which essentially constitutes the coat or fur, and to which many of the clinical characters of the tongue are due.

The superstructure has but a brittle connexion with the rete Malpighii, a line of fracture often presenting itself with much regularity along their junction; on the other hand, the rete Malpighii is intimately attached to the corium, so that not only abnormal, but even exceptional, circumstances are needed for their separation. The Malpighian layer is a very definite and constant structure—the chief landmark anatomically; what is above varies almost infinitely; the deep layer should not be quite bare, nor should the accumulation be such as to be level with, and so obscure, the papillary eminences. The papillæ themselves commonly show each a tip of horny epithelium, white to the naked eye, yellow to the microscope. This varies much in health; so much in disease that the characters of coating and furring mainly depend upon it.

On the surface of the tongue, attached chiefly to the prominences of the epidermis, is a varying amount of parasitic growth, chiefly in the shape of the micrococcus. This presents itself chiefly in the shape of rounded accumulations upon the outstanding fibrillæ, like the inflorescence of a bulrush. Besides this, there are often seen, especially about the papillæ, granular heaps of bacteria and other parasitic matters, as well as detached epithelial cells and accidental matters derived from food; but the total bulk of the accumulation, whether parasitic or accidental, bears but a small proportion to the epithelial structure of which the coat or fur essentially consists. The adventitious growth is rather an appendage to the coat or fur than a necessary part of it. In certain conditions of disease, of which more hereafter, the parasitic growth, as well as the epithelial, may be in great excess.

The characteristics of health in the mucous membrane of the tongue may be thus summed up. The corium must not be over-injected or over-nucleated, nor must it present numerously the extravasation of leucocytes. The Malpighian layer must display no excess of proliferation. The middle layer of epithelium, which corresponds to the corneum of the skin, must be present but not superabundant. It should completely cover the rete Malpighii between the papillæ, but should allow these to be prominent at their points of emergence. The epithelial processes of the papillæ should be distinguishable, but not too long; upon these may be a few scattered points of vegetation. Finally, the surface described must be exposed, not concealed by any coat or accumulation, however derived, and it must be normally moist.

I need say little clinically about the healthy tongue. It will at once be seen that the healthy tongue is not the same thing as the tongue in health. There are individual peculiarities in the growth of lingual epithelium in virtue of which some tongues are always coated, others not so when coating might be expected. With some persons a coated tongue is habitual, and not only consistent with health, but a sign of it. On the other hand, diseases like pneumonia, in which commonly the tongue is quickly and thickly coated, may fail to produce this result. It takes time to coat the tongue. In the table two cases of pneumonia are referred to with a clean tongue. One was only in the second day and scarcely counts. In the other, a not very severe case of pleuro-pneumonia with a temperature of 102°, the tongue remained throughout so far clean that it could not be called otherwise than natural. It displayed a general fine white sprinkling, like April hoar-frost spread, which did not overcome the underlying tint. This absence of coat is quite exceptional in the circumstances, and probably shows habitual, but unusual, scantiness of the epithelial crop. There are also peculiarities in health which concern the saliva. An old woman, to be later referred to, displayed under capillary bronchitis a red dry tongue, from which I was disposed to augur ill. She got well and the tongue remained the same; she assured me that it had always been so, and I could only infer that the want of saliva, to which, as I shall presently show, the dryness and bareness of the tongue were due, was habitual and consistent with general health.

There are local and chronic diseases in abundance in which the tongue is normal; few involving pyrexia or any general disturbance. I shall show that this organ responds chiefly to constitutional variations. If the system at large is unaffected, so, as a rule, is the tongue. It is obvious that the conditions of observation in a hospital, whence my tables were chiefly derived, necessarily presented disease more abundantly than health, so that the morbid associations of the clean tongue are exaggerated.

1. *Not abnormal.*

Tetanus	1	Pyo-pneumothorax	1
Chorea	2	Phthisis	1
Sunstroke	1	Whooping-cough	1
Valvular disease	1	Ascites (hepatic); dry diet	1
Intra-thoracic aneurysm (dry diet)	1	Chronic albuminuria	2
Pneumonia (one on 2nd day)	2	Diabetes insipidus	1
Pleuritic effusion (dry diet)	1	Syphilis	1
		Anæmia	1
		Convalescent	6
Total	24		

Observations relating to the above cases.

Pyrexia (temp. from 102° to 104°)	2
Hyperpyrexia (temp. over 104°)	0
Temperature not recorded	1
Prostration	0
Chiefly on liquid diet	7
Diet strictly limited to liquids	0
Dry diet	3
Saliva abnormally deficient	2

Average temperature of 20 cases, 98·5°.
Died, 2; recovered, 8; relieved, 13; not relieved, 1.

CLASS 2.—*Stippled or Dotted Tongue.*

This presents the first deviation from health. There is an excess of coat or fur, not uniformly spread, but displayed only on the points of the papillæ. The term *fur* is perhaps more suited to an interrupted or punctiform covering than *coat*, which may be limited to one which is continuous; the fur, however, is here but a mere beginning, which may develop into the coated tongue or that which will be described as furred or shaggy.

Before proceeding to minute particulars, the naked-eye characters may be briefly indicated. The tongue in this phase presents merely an exaggeration or accentuation of the covering of health; the state may indeed be so nearly that of health that the difference may pass without notice. The tips of the papillæ are covered with white more closely and broadly than within healthy limits, and there is perhaps a little more than the normal contrast between the white summits and the pink intervals. The term *stippled* or *dotted* fairly describes the aspect of the dorsum. To borrow from the nomenclature of small-pox, the acquisition is discrete, not confluent. The spots on the papillæ are usually white, less often yellowish or brownish. The spotting is almost or quite absent on a narrow lateral margin, and also on a small triangular patch at the tip, the apex pointing inwards. These clear spaces are made so by the friction of the teeth at each side, and of the palate or gums at the tip.

The minute changes are to be made out only by examination in section. It is thus made evident that the essential alteration is in the amount and disposition of the epithelial covering. The change is in the way of excess, but the excess relates only to the condensed superficial structure, where the cells are flattened, fibrous, and rejective of carmine; not, or but very slightly, to the deeper parts, where the early shape and characters of recency remain. There is as yet no considerable or constant increase in the epithelium of the deeper sort, though there may be indications of a tendency in this direction; and here and there, but as yet not abundantly, excess of nucleation appears in the corium, especially about the papillæ. There is no marked injection of the blood-vessels. The intervals between the prominent papillæ are nearly empty, as in health. On their tips is commonly more or less parasitic growth, mostly the micrococcus, gathered, as it is apt to be, upon the projecting filaments. The proportion which these parasitic products bear to the total thickness of the coat or fur can be seen only in section. By mere scraping of the surface a false impression is given of the amount of these superficial products. The crop bears only a minor proportion to the bulk of the coat, the major part of which is epithelial. The parasites are the fringe of the garment rather than the garment itself.

We see in this tongue mainly the evidence of disuse. The length of the papillary processes may be explained by the absence of customary wear, and, indeed, is exactly what want of friction and scour might be expected to cause. There is little evidence of overgrowth in the shape of new epithelium, but only a retention of what must necessarily be old. In the parasitic formation there is nothing special or peculiar, but only what is found in health in less abundance. As with the epithelium, what is indicated is rather the retention of what is old than the development of what is new. We may attribute the accumulation, whether epithelial or parasitic, to the absence of food connected with loss of appetite, and perhaps in some measure to the stillness of tongue which illness engenders. I have referred to slight and early evidences of overgrowth of epithelium. This will become more apparent when I speak of more advanced changes.

This variety of tongue presents the first step in morbid acquirement and the first departure from health. A large number of persons could be found with this tongue whose condition is not abnormal. I have tabulated sixty-one cases in which this state of tongue was seen. All were hospital patients in whom absolute health was scarcely to be looked for; among them acute disease was infrequent, chronic disease common. Heart disease was more numerously presented than any other disorder, occuring in seven. Pneumonia and pleurisy, taken together, were found also in seven; but among these was only one instance of pneumonia in an active and pyrexial state. Rheumatism described as acute was present in five cases, but in only three was this adjective applicable in its fullest sense.

The general absence of pyrexia was striking: the temperature in only three cases reached 102°; in no case was it known to pass 103°. The diet in the large majority of cases comprised solid food. Three patients were kept, for special reasons, as short of liquid as was practicable. In these the saliva was markedly deficient—a deficiency which was noted in but four other instances. Extreme prostration existed in but one, together with acute obstruction of the bowel. Thus this tongue does not belong to pyrexia, and seldom concurs with grave constitutional disturbance of any kind. With the acute obstruction the temperature was normal. It presents itself often with local or organic disease, where there is little fever and seldom much vital failure.

Subjoining the cases where the stippled or dotted tongue was dry, and putting aside one where the dryness was due to diet, a larger proportion of acute disease

and of constitutional disturbance is apparent when the tongue is dry than when it is moist.

2. *Stippled or dotted with white; moist.*

General paralysis or paresis	2	Fæcal accumulatn. in colon	1
Chorea	1	Epistaxis, nostrils plugged	1
Hysteria	2	Jaundice	2
Neuralgia	1	Ulcer of stomach	1
Valvular disease of heart	7	Dysentery	1
Pericarditis	1	Chronic albuminuria	5
Pneumonia, pleuro-pneumonia, broncho-pneumonia	6	Diabetes mellitus	2
Pleurisy	1	Hæmoglobinuria	1
Laryngitis	1	Acute rheumatism	5
Bronchitis	2	Subacute rheumatism	2
Phthisis	1	Acute gout	1
Tonsillitis (follicular)	1	Chronic gout	3
Acute obstruction of bowel	1	Anæmia	4
		Lymphadenoma	1
		Acute alcoholism	2
		Dry diet (1 for ascites, 1 for pleural effusion, 1 for cardiac dropsy)	3
Total	62		

Observations relating to the above cases.

Pyrexia* (temp. 102° to 104°)	3
Hyperpyrexia (temp. above 104°)	0
Much prostration (acute obstruction of bowel)	1
Prostration not severe (pericarditis)	1
Chiefly on liquid diet	10
Strictly limited to liquid diet (acute obstruction of bowel)	1
Dry diet (liquids reduced as far as possible)	3
Saliva abnormally deficient (including 3 under dry diet)	7

Average temperature of 42 cases, 98·5°.

Died, 15; recovered, 18; relieved, 25; not relieved, 3.

* The temperature was not noted in 13 cases; it may be taken as generally not materially elevated.

2 (D). *Stippled or dotted; dry.*

Pleurisy with effusion (dry diet)	1
Peritonitis (opium)	1
Acute obstruction of bowel (volvulus)	1
Chronic albuminuria	1
Total	4

Observations as to the above cases.

Pyrexia (temp. 102° to 104°)	0
Hyperpyrexia (temp. over 104°)	0
No observations as to temperature	1
Average temperature of 3 cases	98·6°
Much prostration	2
Prostration not severe	1
Chiefly on liquid diet	0
Strictly limited to liquid diet (1 fed by bowel)	2
Dry diet	1
Saliva abnormally deficient	—

Died, 1; recovered, 1; relieved, 2.

CLASS 3.—*Stippled and Coated.*

The next step in the acquirement of coat is intermediate between the stippled and the coated, presenting a mixture of the characters of both. The white accumulation is present on the papillæ, but is not limited to them; at the back and along the median fissure it fills up the depressions, so that the tongue, while displaying the dotted character about the anterior and lateral parts, is at the back continuously covered, the continuity being implied by the term *coated*. This tongue is one of very frequent occurrence, perhaps more so than any other which can be regarded as morbid; it represents but a slight departure from health; since it partakes much of the class preceding, and of that following, it may be dismissed with brief description. A partial stippling may present itself as a stage either in the formation of coat or its removal; an example of the latter is seen in the drawing taken during recovery from pneumonia.

The microscope displays in a more marked manner the characters which have been described as belonging to the stippled class; the papillary processes are elongated and conspicuous, but there is in addition some increase of the deep epithelium by which the intervals are partly filled, the filling up made more complete by detached epithelium and accidental matters. Though the deep epithelium does not present to the naked eye the whiteness of the superficial or horny kind, yet the increase of the latter and the mixing together of the sloping ends of the papillæ give a continuity of whiteness, though only in the central and back parts, where the epithelium is most plentiful. This tongue shows want of wear, together with more evidence of increased growth than in the preceding class.

Looking at this class clinically, we still find a large proportion of chronic disease, but note an increase of acute and constitutional affections. I may observe as an apparent exception that pneumonia is presented less numerously, though acute rheumatism is more so, and typhoid is now introduced. The change in the character of the cases is shown by the increase of pyrexia, though this is still slight compared with what will be seen presently, by the increase of constitutional depression, and by the number of cases in which the state of the patient was such as to necessitate liquid diet.

3. *Partly stippled; partly coated; normally moist.*

Bulbar paralysis	1	Anasarca (cause uncertain)	1
Cerebral hæmorrhage	1	Diarrhœa	1
Cerebral embolism	1	Constipation	2
Hemiplegia (cause uncertain)	1	Colic	1
Giddiness	1	Chronic albuminuria	6
Chorea	1	Acute rheumatism	7
Hysteria	2	Subacute rheumatism	2
Valvular disease of heart	5	Chronic rheumatism, or sciatica	2
Pericarditis (not rheumatic)	1	Gout	3
Pneumonia	2	Congenital syphilis	1
Laryngitis	1	Anæmia, chlorosis, &c.	4
Bronchitis	1	Addison's disease	1
Asthma	1	Ague	1
General tuberculosis	1	Typhoid	3
Phthisis with hæmoptysis	2	Erythema nodosum	1
Ulcer of stomach with hæmatemesis	1	Eczema	2
Cirrhosis of liver	1	Pemphigus	1
Ascites (cause uncertain)	1	Acute alcoholism	1
		Abscess, internal, no discharge	1
		Stricture of œsophagus	1
		Convalescent	2
Total	69		

Observations relating to the above cases.

Pyrexia (temp. 102° to 104°)	6
Hyperpyrexia (over 104°)	0
No observation as to temperature	14
Much prostration	5
Prostration not severe	6
Chiefly on liquid diet	23
Strictly limited to liquid diet (stricture of œsophagus, 1; diarrhœa, 1; constipation, 2; colic, 1; typhoid, 3)	8
Dry diet, liquids reduced as far as possible (ascites)	1
Saliva abnormally deficient (decidedly), including 1 under dry diet	5

Average temperature of 54 cases, 98·7°.

Died, 7; recovered, 30; improved, 26; not improved, 5; uncertain, 1.

CLASS 4.—*The Coated Tongue.*

The next degree of epithelial excess, whether by retention or over-production, results in the formation of a continuous coat or one continuous over the greater part of the dorsum. This covering presents great variety and many indications to the naked eye. There is scarcely an acute or subacute disorder at some period of which the tongue is not coated; this holds good especially with febrile complaints. This state of the tongue is often a step to other changes, those often of more serious import. Two special varieties of coated tongue will receive separate notice: the *strawberry* tongue, which, besides being coated, is much injected; and the *plastered* tongue, in which the coat is superabundant and has certain characters of recency. Putting these kinds aside

for the present, the generally coated tongue is only an advance upon that which is partially so, just as the partially coated tongue is an advance upon that which is simply dotted.

In the ordinary varieties of coated tongue, the coat which is continuous between the papillæ covers the greater part of the dorsum, being thickest where friction is least, about the back and median furrow. It may be dirty-white, greyish, or yellowish. The limitation at the tip and edges is not abrupt; there are no striking contrasts of colour; neither is the coat very white, nor where it is absent is the mucous membrane vividly red. The fungiform papillæ may be visible where the coat is shelving, but they are not remarkably injected as with the strawberry tongue. Such a tongue may be anæmic or sodden-looking, especially when the patient is anæmic; the condition chronic, or associated with nervous depression. Good examples of the chronically coated tongue are presented in the drawings from a case of floating kidney and neuralgia under morphia, and one from a case of chronic dysentery under opium. The coat may be variously tinted by accidental circumstances, especially by colouring matters, which are swallowed or vomited. It may be made bright-yellow or olive-green by bilious vomit, or brown by fæcal vomit. Iron will sometimes make it inky. Iron and port wine used alternately will sometimes convey a deep brown to the coat, tannate of iron resulting from this combination. I once knew an intensely black colour to be imparted to an otherwise light-coloured coat by artificial teeth. Probably some mercurial amalgam had reacted with sulphuretted hydrogen in the coat and produced the black colour.

The coated tongue may lose its coat in two ways: it may gradually thin off with a shelving edge, exposing a moist and natural surface, or it may break away in flakes after displaying a surface which is red and dry; the former method, implying, as it usually does, the restoration of the healthy surface, is obviously of the better omen.

Often in circumstances which will hereafter claim attention, the coat becomes dry, brown, and cracked, sometimes presenting rectangular fissures like crocodile's skin. This amounts to what I shall presently describe as the *encrusted tongue*, towards the making of which the coated tongue is a step.

Microscopic examination of the coated tongue shows as the essential change excess of epithelium of every kind. The papillæ are prominent, their pillars of corium stand well out, and upon them are long processes of the carmine-refusing epithelium, which is horny, superficial, and old. Between these protrusions is a superabundance of the full-bodied nucleated epithelium such as belongs to the intervals by which these spaces are more or less filled up. In some cases this accumulation is surmounted by a thin layer which has undergone the horny transformation. When this is so, it easily accounts for the continuity of whiteness, since epithelium of this sort is, when moist, white to the naked eye. The continuity of whiteness, however, upon which the definition of the coated tongue rests, is more commonly maintained by the approximation of the long processes, and the filling of the intervals by accidental matters. There is as yet no marked injection, no great evidence of overgrowth in the Malpighian layer, no constant hypernucleation of the corium. What alteration of growth there is is in the direction of too much; but there is no such extravagance, as will be noted in some conditions to be presently considered.

On and about the papillæ parasitic growths such as have been already described are often abundant, but as these are not especial to this variety of tongue, nor add very materially to the bulk of the coat they need no detailed notice.

Clinically, the coated tongue brings with it a further increase of acute and febrile disease. Taking together the moist and dry kinds, pneumonia or pleurisy was present in 10 of 68 cases; typhoid was slightly more frequent than in the preceding classes; while other febrile disorders now intrude themselves into the list. Pyrexia and prostration are both on the ascent, showing that the generally coated tongue is associated with a larger proportion of constitutional affection than where the coat is more partial. It was observed that the saliva was noticeably deficient in a larger proportion of cases than heretofore—in 12 of 68 of the coated tongue, in only 5 of 69 where the coat was partial.

4. *Coated white; normally moist.*

Cerebral hæmorrhage	1	Dyspepsia	1
Hemiplegia (cause uncertain)	2	Repletion	1
Pneumonia (pleuro-pneumonia)	6	Stricture of œsophagus	2
Pleurisy	2	Starvation	1
Laryngitis	1	Peritonitis	1
Bronchitis	2	Chronic albuminuria	1
Cancer of lung	1	Uræmia, vomiting, suppression of urine	2
Phthisis	1	Acute rheumatism (including cardiac affection)	1
Phthisis and hæmoptysis	2	Subacute rheumatism (including cardiac affection)	3
Aneurysm (?)	1	Chronic rheumatism and sciatica	1
Acute obstruction of bowel (small bowel)	1	Typhoid	4
Chronic obstruction of bowel (sigmoid flexure)	1	Febricula	1
Diarrhœa	2	Erysipelas	1
Ulcer of stomach (hæmatemesis)	1	Erythema nodosum	1
Vomiting (uterine)	1	Convalescent	2
Total	48		

Observations relating to preceding cases.

Pyrexia (temp. 102° to 104°)	9
Hyperpyrexia (temp. over 104°)	0
No observations as to temperature	5
Much prostration	11
Prostration not severe	4
Chiefly on liquid diet	11
Strictly limited to liquid diet	15
No food by mouth; fed by rectum (stricture of œsophagus)	2
Dry diet	0
Saliva abnormally deficient	6

Average temperature of 41 cases, 99·1°.

Died, 11; recovered, 15; improved, 21; not improved, 1.

4 (D). *Coated white; partly dry.*

Hemiplegia	1	Acute obstruction of bowel	1
Myelitis (acute)	1	Tonsillitis	1
Valvular disease and disease of aorta	2	Dyspepsia	2
Pneumonia	2	Repletion (surfeit)	1
Phthisis and pneumonia (?)	1	Chronic albuminuria	1
		Diabetes	2
		Acute rheumatism	5
Total	20		

Observations relating to the above cases.

Pyrexia (temp. 102° to 104°)	6
Hyperpyrexia (over 104°)	0
No observations as to temperature	2
Much prostration	3
Prostration not severe	—
Chiefly on liquid diet	12
Strictly limited to liquid diet	3
Dry diet	0
Saliva abnormally deficient	6

Average temperature of 18 cases, 99·5°.

Died, 6; recovered, 5; relieved, 8; uncertain, 1.

CLASS 5.—*Strawberry Tongue.*

This needs but a brief mention. Usually with what may be called the acute coated tongue, more especially when this approaches the plastered character to be next noticed, the fungiform papillæ show through the coat at the tip and edges. These are often more or less injected, especially with scarlatina, where they show in a striking manner the increased vascularity of the organ due to its participation in the cutaneous eruption.

The association with scarlatina would have been displayed more prominently in the table but that this disease is not, as a rule, admitted into St. George's Hospital. The strawberry state is sometimes seen in other disorders, most of which are of the acute febrile kind; pneumonia, typhoid, and perityphlitis are presented in the record. Injection of the tongue is an accompaniment of many febrile states, not only giving colour to the substratum but also promoting the epithelial growth. Pyrexia is generally present with the strawberry tongue, and that to a greater degree than with the antecedent classes.

5. Strawberry tongue; moist.

Typhoid	1	Pneumonia	2
Scarlatina	3	Perityphlitis	1—7

Observations relating to the above cases.

Pyrexia (temp. 102° to 104°)	4
Hyperpyrexia	0
No observations as to temperature	2
Prostration, not severe	1
Chiefly on liquid diet	5
Strictly limited to liquid diet	2
Dry diet	0
Saliva abnormally deficient	3

Average temperature, 5 cases, 102°.
Died, 0; recovered, 2; improved, 3; sent out, 2.

CLASS 6.—*Plastered Tongue.*

The variety alluded to as *plastered* is well marked, has much clinical importance, and demands a separate notice. Clinically, this might be called the coated tongue of acute disease. The coat, which is white, moist, though generally not fully so, and uniform, except at the edges, is spread over the dorsum, excepting a narrow margin and a small space at the tip, with a thickness, smoothness, and definite limitation which suggests the laying on of plaster. The edges, though definite, are somewhat bevelled, and are perforated as they thin with the red fungiform papillæ, after the strawberry style. Sometimes, as in the drawing displayed, taken on the fourteenth day of typhoid, the covering is so white, thick, and fine in grain as to give the idea of plaster-of-Paris or white lead smoothly spread; at other times it is coarser and less purely white, as if a fine kind of mortar had been used. The mucous surface where exposed is often redder than natural, especially when the coat is of the whiter kind. The more recent the illness the whiter the coat. When very thick, white, and strongly contrasted with the red margin, the indication is of acute disease—in other words, of disease recent and severe. Were it not recent the coat would not be so purely white; were it not severe the thickness could not have come in the time. Each day the tongue becomes less white, and gradually assumes a dirty yellowish or brownish tint. A brown colour associated with dryness and cracks commonly appears when the disease is severe, of long continuance, and attended with prostration. The properties of brownness and dryness may accompany many states of tongue, and will receive further notice.

I may in a few words indicate wherein the minute characters of the plastered tongue differ from that which is commonly coated. The difference is mainly one of degree. The papillæ are now more elongated, even so much so as to resemble those of the shaggy or furred tongue. With this we have more complete filling up of the intervals, and even some overlying of the papillæ with matters partly derived from the tongue itself as epithelium, partly parasitic and partly accidental. This condition is a great way towards the *encrusted tongue*, the chief difference being in the presence or absence of moisture. The plastered tongue when dry becomes the encrusted. In the plastered tongue the hypertrophy of the superficial epithelium, as yet uncomplicated to any great extent, attains its climax

Clinically, this tongue never fails to arrest attention; it is the ensign of recent acute febrile disease. The chronic coated tongue is distinguishable from the plastered by its dirtier colour and the less vivid apposition of white and red. Of 32 cases of the plastered tongue, the table shows 8 of pneumonia, 3 of acute bronchitis, 3 of acute rheumatism, 6 of typhoid, and 4 of other acute febrile affections. Pyrexia was marked in 18 cases, while the general average of temperature was 101·6°, a higher level than has yet appeared, save with the strawberry tongue, a nearly allied condition. Prostration, mostly such as belongs to the febrile state, was recorded in 8; while the increased proportion of patients on liquid diet bears testimony to the same association. The saliva was noticeably deficient in a larger proportion of instances than with any tongue yet before us, save the small strawberry class. This does not imply merely that the tongue was dryish, which might be due to the evaporation caused by the increased heat of the body, but to lessened secretion, as was in some instances ascertained with the cannula. We see a close association with pyrexia which stimulates cell growth, and is probably the chief agent in producing the characteristic epithelial luxuriance, the products of which are abnormally retained partly by reason of the scantiness of saliva.

6. White; plastered; moist.

Cerebral tumour	1	Jaundice (enlargement of liver)	1
Pneumonia, pleuro-pneumonia	8	Acute rheumatism (including pericarditis &c.)	3
Bronchitis (acute) ...	3	Typhoid	5
Phthisis & hæmoptysis	1	Febricula (or febrile attack of uncertain nature) ...	1
Stomatitis	1	Measles	1
Acute obstruction of bowel (volvulus) ...	1	Mumps	1
Dysentery	2	Pyæmia	2
Perityphlitis	1		
Total	32		

Observations relating to the above cases.

Pyrexia (temp. 102° to 104°)	15
Hyperpyrexia (over 104°)	3
No observations as to temperature	5
Much prostration	5
Prostration not severe	3
Chiefly on liquid diet	16
Strictly limited to liquid diet	8
Dry diet	0
Saliva abnormally deficient	13

Average temperature of 27 cases, 101·6°.
Died, 10; recovered, 11; improved, 11.

Before proceeding to other varieties of tongues, I will, now that we have reached in the plastered tongue the climax of simple coating, look back upon the several grades of that condition, and try to collect the instruction which flows from them.

First pathologically. The most important item is the lengthening of the papillæ; and the first question, how far this depends on disuse from want of food &c., and how far on overgrowth. Want of wear must have some effect in allowing this elongation, but it would seem to be too rapidly produced to be wholly thus accounted for. A greater length is attained within the short duration of an acute disease than in its longer time of a chronic one, even though it entail more complete disuse. Not only are the epithelial ends to which only the wear applies elongated, but so in many cases are the deeper parts of the column which are unexposed. The epithelium also between the papillæ, which, as being less exposed than they are, must be less influenced by wear, is also in many cases increased in thickness; when it is so it gives strong evidence of over-production as against deficient removal. Coating, therefore, is the result in part of disuse, want of rubbing and washing, as the somewhat increased surface parasites show, but chiefly of morbid overgrowth.

The clinical circumstances give similar evidence. It is true that the greater degrees of coating occur chiefly in patients who are kept without much solid food. On the other hand, in many conditions with which solid food and mastication are almost completely absent, the thick and rapid covering of acute disease does not present itself. I have watched with interest from this point of view cases of stricture of the œsophagus. In three such only the lower degrees of coating were presented, though in all solids were impossible, and in two food was introduced chiefly by the bowel. In a fourth the tongue was dry and furred, but the furring came on with dryness, on which it was apparently dependent. I shall revert to the influence of diet upon the tongue, and simply say here that a comparison between the thinly or partially coated tongue of simple abstinence, and the thickly and generally coated tongue where a less degree of abstinence is associated with a febrile state, shows conclusively, as it appears to me, that in the latter condition we have something to look for beyond inaction.

I shall refer later to the effects upon the tongue of the limitation of liquid, but it is enough for the present to say that want neither of food nor of drink avails to produce the thick coating which in other circumstances is so characteristic.

A condition which may be briefly referred to in connexion with coating of the tongue is diminution of saliva, though I shall consider this subsequently on a wider basis. As a general rule, whatever be the reason, the saliva lessens as the coat thickens. Taking together the lesser degrees of coat presented with the stippled, and stippled and coated, classes, this secretion was notably deficient in 12 of 170 cases. Taking

together the higher degrees of coat in the strawberry and plastered kinds, the saliva was notably deficient in 16 of 39. Thus generally, up to this point, the less saliva the more coat. But it will appear later that almost total absence of this fluid may concur with a tongue which is almos absolutely without coat. For the present it is enough to point out that the deficiency does not alone account for the excess of covering under consideration.

To account for this there remain but two causes which present themselves as probable: the hypothetical existence of a morbid poison as in fevers, and pyrexia. As to poison, looking at the high degrees of coat in the classes of strawberry and plastered, I find that of 39 such cases 14 were of typhoid, febricula, scarlatina, measles, mumps, or pyæmia, and 3 of acute rheumatism. Thus, unless we include pneumonia, of which there were 10 cases, less than half fell within this hypothesis. Among the rest were many cases of local or organic disease, which were clearly outside this supposition. Among these were 3 cases of acute bronchitis, 1 of phthisis, 2 of perityphlitis, 1 of volvulus—enough to show that local disease, or disease not connected, so far as we know, with any blood contamination, may give rise to what may be called acute coating of the tongue.

Pyrexia remains to be considered. When the tongue is normal, so, as a rule, is the temperature. I have already referred to one case as exceptional in which the tongue remained clean in the presence of pneumonia. Putting this aside, I have already referred to 22 cases in which, in different circumstances, the tongue was reasonably clean, the temperature was raised only once, and then only to 101·5°. Taking, now, the degrees of coating in ascending order, we find that as the coat increases so with almost exact correspondence does the temperature.

Relations of Body Heat to Coating of Tongue.

Class of tongue.	Percentage with pyrexia.		Average temperature.
Stippled	4·9	.....	98·5°
Stippled and coated	8·6	.....	98·7
Coated, moist	18·7	.....	99·1
Coated, dry	30·0	.....	99·5
Strawberry	57·1	.....	102·0
Plastered	53·1	.....	101·6

The annexed statement needs no explanation; whether we look at the frequency of pyrexia in the class, or at the average temperature of all cases in it, the figures are equally significant. Taking the strawberry and the plastered tongues as practically the same, the proportion between coat and heat is maintained with remarkable exactness. And we have as yet failed to find any other condition besides heat of body which has as uniform a relation to the alteration in question.

That heat up to a certain point promotes the growth of cells is a fact well known to experimental physiologists. I take it on the authority of Dr. Delépine that a temperature of between 100° and 104° is favourable to the growth of tissues, one of above 105° detrimental to it. It probably very rarely happens that the dorsum of the tongue, exposed as it is, and necessarily cooler than the constantly covered parts, reaches a temperature high enough to lessen growth; almost any degree of elevation possible in the circumstances must be within the limits of that which tends to increase. In pyrexia, therefore, we have, if not the only maker of coat, certainly the chief one.

CLASS 7.—*The Furred or Shaggy Tongue.*

As the papillæ of the coated tongue continue to lengthen, and adventitious matter to collect between and upon them, the advancing process presents itself in two shapes, which differ as the elongation or the accumulation preponderate. When there is great projection of the papillæ, so that these stand out distinctly, the term *furred* or *shaggy* represents this condition. Where these shapes are covered in, and levelled over by matter, whether derived from the tongue itself, or from without, the term *encrusted* may be employed. The two conditions occur in many similar circumstances, and are continually interminglied; nevertheless, they occur separately, and must be so described. A stippled or dotted tongue by increase of each point of coating may become furred, a process which dryness facilitates. In a different way a thickly coated tongue may become furred. The lengthened papillæ may present themselves as a coarse pile like plush, and so make the *moist furred tongue*. A little drying will cause the threads to collect into sheaves, and so form the *dry furred tongue* which I am about to describe.

To the naked eye and during life the fore part is irregularly rough, with large pointed papillæ, on the tips of which are brown spots, or the whole may be more or less brown. The central and back parts are often covered with irregular pointed masses, such as are represented in the drawing, frequently more or less mixed up with and obscured by dry crusts often like crocodile's skin. I have seen after death (in a case of malignant disease of the larynx) much of the hinder region of the tongue covered with a shaggy villous growth, like coarse hair; but in life this hirsute state is commonly much obscured by incrustation.

Under the microscope the chief characteristics of the tongue are the enormously elongated filiform papillæ, every part of which is increased, both the deeper portion derived from the corium and the superficial epithelial part, the latter most so. Micrococci are sometimes present on the tips of the papillæ, but do not add materially to their bulk.

The elongation may conceivably be due either to overgrowth or deficient removal; there is often some increase of the deep epithelium, but seldom much; occasionally some over-nucleation of the corium is present. In fine, there is some evidence of hyperplasia, but not enough to account for the striking changes which the tongue presents. These would seem to be mainly due to want of wear, of which the papillary ends, hardened by dryness, are especially resistant. Beyond the resistance which dryness entails, it is possible that the unnatural state of surface which goes with it may act as an irritant and stimulate growth.

As to the clinical relations of this tongue, I have been able to collect, notwithstanding the generality of dryness, a few instances in which the furred tongue was moist, or at least not dry. One of these was of a kind sometimes seen where great elongation of the papillæ is consistent with appetite and health. The only conditions which could be suggested as provocative of the state of tongue in this case were old age and constipation. I have referred to the state of pile, which may be regarded either as an advanced stage of the coated tongue or an early one of the furred. In the table it is seen to be associated with pneumonia and with anæmia.

The *dry* furred tongue is of more importance than the moist, but it occurs in different circumstances and is by no means uniform in its indications. It may succeed, as has been shown, either upon the dotted tongue or the coated, in the course of advancing disease; it may also occur with retrogressive disease, as when the encrusted tongue sheds its coat so as to expose the subjacent elongated papillæ. The class therefore presents much clinical variety. It has been shown that the furred or shaggy tongue is largely the result of disuse and want of moisture, which latter condition is nearly essential, though not absolutely so. The papillæ harden with dryness, as has been stated, and become abnormally resistant of friction, which in the absence of solid food and mastication is diminished. The saliva is obviously deficient, as judged by the difficulty of spitting and by the results of catheterisation of the parotid. It must be stated, however, that the latter operation was not often performed, the extreme illness of the patient often opposing a hindrance. The fact, however, was clear without this test; and the conclusion warranted that the dryness was in general due to want of this secretion.

The accompanying tabulation speaks for itself. I need not allude again to the instance where a profuse hirsute growth was conjoined with sarcoma of the epiglottis and tonsil; here the results of want of friction were chiefly evident, though there was some evidence of overgrowth in hypernucleation. I may next refer to a group of cases in which, as presumably in the last case, the condition was present with little or no pyrexia. This includes two cases of coma from brain disease, two of advanced cirrhosis, one of enlarged liver of uncertain nature, two of diarrhœa, and three of enforced dry diet. Thus dehydration, be its cause what it may, is a definite factor in producing the tongue in question. In other cases—to wit, typhoid and acute rheumatism—pyrexia was present, but it is clear that this is not essential. It is worth observing how infrequent is pyrexia, and how low its range in the dry tongue now in question, as compared with the plastered moist tongue last discussed. This shows how little of the desiccation is to be attributed to evaporation connected with increased heat of body. And

I may make a similar negation with regard to another condition to which dryness and furring have been attributed—namely, habitual openness of the mouth, especially during sleep; I find but three instances in which this attracted notice, and I am persuaded that other causes of drying and furring are far more important.

In short, the dry furred tongue is essentially due to two causes which are connected together—want of saliva and want of wear. Among the causes of want of saliva, the most important is a state of system which cannot be otherwise defined than as failure of nutrition and vital power. With how great a variety of disorders this failure is associated I need not recapitulate; I have expressed the greater degrees of it by the term "prostration."

7. Furred or shaggy; not dry.

Pneumonia, pleuro-pneumonia	2
Perityphilitis, perforation of appendix	1
Chronic constipation	1
Granular kidney; uræmia	1
Total	5

Observations relating to preceding cases.

Pyrexia (temp. 102° to 104°)	1
Hyperpyrexia	0
No observations as to temperature	2
Average temperature (of 3 cases)	99·8°
Much prostration	2
Prostration not severe	0
Chiefly on liquid diet	2
Strictly limited to liquid diet	1
Saliva abnormally deficient	2

Died, 3; recovered, 1; not improved, 1.

7 (D). Furred or shaggy; dry.

Disease of brain (coma)	2	Diarrhœa	2
Hemiplegia (embolic)	1	Perityphlitis	1
Chorea	1	Abscess (in axilla)	1
Valvular disease	1	Acute rheumatism	1
Aneurysm or dilatation of aorta (dry diet) ...	3	Typhoid	1
Broncho-pneumonia ...	1	Convalescence from typhoid	1
Pleurisy	1	Febricula	1
Cirrhosis of liver	2	Movable kidney and rheumatism	1
Enlargement of liver (cause uncertain) ...	1	Chyluria	1
Stricture of œsophagus	1		
Total	24		

Observations relating to preceding cases.

Pyrexia (temp. 102° to 104°)	3
Hyperpyrexia	0
No observation on temperature	2
Average temperature of 22 cases	99·1°
Much prostration	6
Prostration not severe	2
Chiefly on liquid diet	9
Strictly limited to liquid diet	5
No food by mouth (fed by rectum)	1
Dry diet	3
Saliva abnormally deficient	8?

Died, 9; recovered, 7; relieved, 8.

THE EFFECTS OF MODERATE DRINKING ON THE HUMAN CONSTITUTION;

ITS INFLUENCE ON LIVER, KIDNEY, HEART, AND BRAIN DISEASES.

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No. IV.

IT may perhaps be well for me here to direct attention to a not commonly recognised fact—namely, that extensive atheromatous degenerations of the arterial coats not unfrequently occur in otherwise apparently healthy men, who live well and take plenty of exercise, in whom there is either no heart disease at all, or, if there be, the organic change is so slight as not to be detectable [by either stethoscope or percussion. In all such cases the patients are in general full-blooded, the withdrawal of blood from them, either by cupping or venesection, is markedly beneficial from its relieving the blood tension in the diseased vessels. In fact, it is my opinion that the withdrawal of blood, not once, but even repeatedly, in the full-blooded, is exceedingly useful, even in cases of hypertrophy, dilatation, and valvular disease, from its equally relieving the tension in the over-distended and stretched auricles and ventricles.

A most instructive case of atheromatous degeneration of the bloodvessels, without any physically appreciable heart disease, showing the advantages of bleeding, I shall now briefly relate. It was that of a dignitary of the Church, who, while preaching in St. Paul's, was suddenly seized with giddiness and transient unconsciousness; and while Sir James Paget, Dr. Andrew, and I were debating the question whether or not it would be advisable to abstract blood from him, either by leeching him behind the ears or cupping his shoulders, the consultation was suddenly put a stop to by his daughter rushing into the room and exclaiming that her father's nose had burst out bleeding. Nature had therefore settled for us the disputed question, and on our reaching the bedroom, from finding that the condition of the patient was already somewhat ameliorated, the epistaxis was allowed to continue until about ten ounces of blood had come away; and although this did not suffice to arrest the disease, yet the patient, who was over seventy, rapidly recovered from the immediate effects of the cerebral attack, and lived for some months afterwards.

As in cases of the so-called constitutional epistaxis of people of over fifty years of age some medical men are fond of prescribing digitalis, it may be well to warn them against doing so in all cases where there is any likelihood of the nasal hæmorrhage being due to atheromatous degeneration of the bloodvessels. In such cases digitalis, like small quantities of alcohol, increases the tension in the weak bloodvessels by augmenting the heart's pulsations, and thus proves more detrimental than beneficial to the patient. Some years ago I saw, along with Sir Prescott Hewett, an example of this kind, where the patient had on one occasion nearly bled to death from his having had digitalis injudiciously prescribed by his local adviser. I say injudiciously, for the nasal hæmorrhage almost entirely ceased on the drug being discontinued, and on curtailing his wine; which, although he thought he took in moderation and no more than what he absolutely required, was, in reality, acting as prejudicially (by keeping up the arterial tension) as the digitalis itself. This gentleman lived for some years afterwards, and ultimately died, I was told, of peritonitis.

It is, I believe, next to impossible to overrate the desirability of impressing patients labouring under heart disease, as well as atheromatous degenerations of the bloodvessels, with the absolute necessity of being extremely temperate in the use of alcoholic stimulants, if they wish either to live long or to ameliorate the disease of the circulatory system under which they labour. For alcohol taken in the form of spirits—brandy, whisky, gin, or rum,—even in teaspoonful doses, by increasing the heart's action has quite as pernicious an effect on the organic structural disease, be its form what it may, as belladonna itself. And I fancy all who have much experience with cardiac diseases know well the intrinsic significance of this remark.

In the early stages of organic disease of the heart or bloodvessels judicious regimen is quite as essential to the well-being of the patient as wise treatment; for if the case be skilfully handled, it is not only possible for death to be long averted, but even the effects of the organic changes reduced, and, like the cracked jug which goes often to the well, the life of the patient may be prolonged for years; while, on the other hand, if the true nature of the case fail to be early recognised, and the patient goes on living as if there were nothing the matter with him, the disease rapidly advances, and ere long the time arrives when it is utterly beyond human power to avert a more or less suddenly fatal ending.

After having so forcibly pointed out the baneful effects of even small quantities of stimulants in diseases affecting the heart and bloodvessels, I think it is time for me to show that in these cases the laws of therapeutics are not, like those of the Medes and Persians, unalterable. This arises from the fact that even the same forms of organic disease affecting the circulatory system occasionally differ very materially in their characters as well as in their course, not only from the special constitutional peculiarity of the patient,

but likewise in a marked degree from the different circumstances under which he is placed; so that stimulants may be employed in one case as a useful adjunct to other treatment, in spite of their being absolutely forbidden in another. In all cases, however, their employment can only be sanctioned under medical advice, for, from its being always much easier to put a thing wrong than to set a thing right, therapeutical combined with pathological knowledge can alone be safely entrusted to decide whether or not alcohol can be given with either advantage or with safety in any given case of cardiac disease. Even here, however, some general rules for alcoholic treatment can be notified. For there is no doubt whatever that, in all cases of cardiac syncope, spirits, in the shape of brandy, rum, whisky, or gin, are potent heart revivers; especially when there exists no actual organic disease of the organ. And even in certain cases where there are valvular derangements alcoholic stimulants may be had recourse to with marked benefit. Moreover, from the fact of alcohol being a powerful anti-flatulent, there is scarcely a single case of organic disease of the heart in which it may not sometimes be administered in small quantities at a time with marked advantage. For it is an undoubted fact, though I fear far from being a generally appreciated one, that a stomach distended with wind is a most dangerous complication in heart disease. Mere gastric flatulence is sometimes, indeed, the immediate cause of sudden death, from the wind-distended stomach pressing up the diaphragm against the apex of the heart, and so impeding its movements, in its weakened state, as actually to arrest them altogether. Most of the cases where patients labouring under heart disease are found dead in bed, after having retired to rest apparently in their usual state of health soon after partaking of a hearty meal, are, I believe, due to the effects of pressure upon the heart—probably the result of the combined action of a distended stomach and falling asleep on their left sides. It is not easy to get statistics on this point, for people are generally in such a state of excitement when they unexpectedly find a relative lying dead in bed that they pay no attention to the position in which he is, and during their attempts to resuscitate him, before the arrival of the doctor, it has been altered. But as far as I have been able to ascertain, the body has most often been found on the left side or back. From this I have become so strongly impressed with the danger attending upon sleeping on the left side, coupled with a wind-distended stomach (the discomfort arising from which may not be sufficient to awaken one from his sleep), that to every patient labouring under heart disease I give emphatic warning never to allow themselves to fall asleep, if they can possibly help it, on their left sides, and never at any time to permit their stomachs to become distended with wind, but to get rid of it by eructating, either with or without the aid of an anti-flatulent, and this more especially before going to bed; and should they have occasion to turn on to their left sides during the night, to always take the precaution of first emptying the stomach of its wind by belching, which a little practice will soon enable them readily to do. I will even go a step further, and say that a wind-distended stomach has brought about the sudden death of patients even while they were not only awake, but up and moving about. That this is no mere ideal assertion I think the case I am about to relate will show. But before referring to it let me remark that the upward pressure of wind against the diaphragm is little less serious in its effects than a similar amount of pressure arising either from ascitic liquid or a tumour in the abdomen, and that in cases where the cavity of the abdomen has already been seriously encroached upon either by a pregnant uterus, ascitic fluid, an ovarian tumour, enlarged liver, spleen, or anything else, it requires but a very small accumulation of gas in the stomach to completely arrest a diseased heart's pulsations. Very early in my professional career I was made painfully conscious of this fact. It happened in the following wise.

While I was acting as house-surgeon to the Edinburgh Royal Maternity Hospital, before taking my M.D. degree, I was one morning hurriedly called to a fine, healthy-looking woman aged thirty-nine, who shortly after partaking of a hearty breakfast suddenly began to gasp for breath. She expired almost as soon as I entered the ward. At the post-mortem examination, the mitral orifice was found in a state of stenosis; but in spite of this she had not complained of cardiac discomfort until her stomach became so distended with food and wind after her breakfast that the heart's action was fatally arrested within ten minutes from the time that she began complaining of the cardiac dyspnœa. There are special reasons for my remembering this case, seeing that it was from her womb that I removed, by the Cæsarean section, a living seven-and-a-half-months' child, now grown up to be a man and father of a family. The case was read by Professor (afterwards Sir) James Y. Simpson before the Edinburgh Medico-Chirurgical Society, and published in the July number of the *Edinburgh Medical Monthly Journal*, 1850. Just as it is the last straw that breaks the camel's back, I think that there can be little doubt that in the above case it was solely due to the trifling additional distension of this woman's stomach by gas, superadded to the hearty meal, and the already diminished abdominal cavity on account of the pregnancy, that the mere wind proved sufficient to totally arrest, by its pressure on the diaphragm, the pulsations of her diseased heart, and thus bring about sudden death. If this view of the case, which subsequent years of physiological as well as pathological experience has led me to adopt, be correct, I think it is well within the range of possibility that had the woman been able to get rid of the wind by belching, either with or without the aid of an anti-flatulent, she might have outlived the temporary attack of cardiac dyspnœa, and survived for some time to come, seeing that up till that fatal moment she had been able to do the work of a hospital servant without any apparent discomfort.

Finally, I think it may be said that the various facts adduced in this essay appear to prove—1. That alcohol, when indulged in, even well within the limits of intemperance, has a most prejudicial effect on heart disease. 2. That sudden spurts of muscular exertion act most deleteriously on all forms of organic cardiac affections. 3. That mental excitement is a cause of rupture of atheromatous blood-vessels. 4. That a mere extra distension of a stomach by wind may suffice to fatally arrest a diseased heart's action. The knowledge of these facts have for some years past led me to make it an invariable rule to impress upon all patients labouring under diseases of the circulatory system, who desire to minimise the effects of their complaints and ward off as long as is possible the inevitably fatal termination, to pay strict attention to what I call the following three golden rules: (1) Take exercise, without fatigue; (2) nutrition, without stimulation; and (3) amusement, without excitement.

ON

OIL OF PEPPERMINT AS AN ANTISEPTIC, AND AS A REMEDY IN PHTHISIS AND DIPHTHERIA.

BY W. LEONARD BRADDON, M.B., B.S. LOND., F.R.C.S.

(Concluded from p. 514.)

IN addition to being, from its potency and other advantages, the best of surgical antiseptics, it is possible that there lies in oil of peppermint a power for good and a field of therapeutic utility vaster in extent and importance than any yet known or suspected. Some cases of phthisis, in which I have employed it as an inhalation, lead me to hope that we may find in it a remedy against the scourge to which we pay annually a tribute of ten thousand lives. Although the publication of immature and insufficient experience is not to be approved, yet great is the importance of any so suggestion which may be of benefit in stamping out tubercle that I have no hesitation in recording my experience of six cases in which I have employed this drug, in the hope that others, with larger and greater opportunities, may confirm, or contradict, the conclusions as to its curative value.

CASE 1. *Early phthisis.*—M. C——, a young lady aged sixteen, in good circumstances. She had characteristic cough, with failing strength and weight; phthisical family history, a brother and sister having previously rapidly succumbed to consumption. The physical signs were—slightly diminished left apical resonance and inspiratory murmur; prolonged creaky expiration; slightly deficient chest expansion over same side; sputum in nummular pellets, with bacilli (stained by β methyl and vesuvine) in great numbers. After being kept under simple observation for a fortnight, with tonics and expectorants given, and no improvement

having been noted, she commenced inhaling oil of peppermint. A Mackenzie's naso-oral inhaler was used; ten drops of pure oil were placed on cotton wool, renewed every few hours, and the inhalation kept up all day while in-doors for six weeks. Dietetic and hygienic directions were given, but no other treatment was employed. The sputum, examined from time to time, was found to contain diminished numbers of bacilli, and finally none. At the end of six weeks every symptom, save a little harsher expiratory murmur, had disappeared. She is now (six months after) free from any sign of phthisis whatever.

CASE 2. *Late acute phthisis.*—Mrs. M——, aged twenty-nine, was the subject of *phthisie galoppante*, rapidly declining after parturition. When first seen it seemed impossible that this woman could live more than a day or two. The sputum, typical, nummular, and purulent, measured from a pint and a half to two pints daily, and was crowded with bacilli and some micrococci. The hectic fluctuated from below 99° to 104° or 105°. Sweating was profuse; diarrhœa continual; emaciation the most extreme. The skin was fetid; the appetite and intelligence unimpaired; the dyspnœa and pulse acceleration great; the voice a faint whisper, and even then produced with effort. Nevertheless, this woman, inhaling the oil, lived for seven weeks. The improvement was at first extraordinary. The sputum from two pints fell to a few ounces. The sweating was less, the dyspnœa was reduced, the pyrexia became less marked, and I had hopes even of ultimate recovery. She was, however, miserably indigent, depending upon charity for every meal, and, after inhaling continuously the pure oil for five weeks and two days, suddenly refused it, complained that it suffocated her, and slid in ten days down the slope to death. The sputum in this case became much less fetid, and contained less numerous bacilli and less pus. But I could not check her diarrhœa by any form of diet or of drugs; the intestines were no doubt already lardaceous.

CASE 3. *Early slow phthisis.*—A married woman, aged thirty-two; her symptoms have steadily progressed for two years; the sputum was little, and showed as usual plenty of bacilli (four or five couples or so on every half-inch cover slip). The cough and emaciation were steadily growing worse; physical signs those of "slight consolidation," with small crepitations. She has inhaled twelve weeks. The symptoms have ameliorated; she is stronger, less wasted, has less sputum, and less cough. The former has fewer bacilli. She is, however, indigent and underfed; lives in a damp neighbourhood, and is overworked. She is still under observation. When ordered to leave off the drug for a week, this case at once grows worse. She does not, however, show great improvement; the disease seems to be held in check, but not to be dislodged,

CASE 4. *Early subacute phthisis.*—Sergeant-Major H——, a previously strong, healthy adult, aged fifty-two. His symptoms of cough, sputum, progressing weakness, and loss of weight have lasted now some months. Signs: those of "consolidation" of left apex, with fairly marked râles. He does not inhale well. He had been warned that all his symptoms would increase, and in every probability grow worse without treatment. But he had had slight hæmoptysis a few days after the first inhalation, which he only used for half an hour, and attributes it to the treatment. Under observation.

CASE 5. *Chronic fibroid (?) phthisis with subacute exacerbations.*—This case, an adult aged thirty-five, has lasted for three years. The inhalation diminishes his sputum, but seems to have done no good. He has inhaled, on and off, for several months. However, he is not worse than at the beginning. His worse symptom is severe "tearing" and "burning" pain all over the chest, especially the mammary regions. He has also frequent attacks of expiratory dyspnœa and physical signs of a large left apical cavity.

CASE 6. *Late acute phthisis.*—A girl aged seventeen. This patient said the inhalation suffocated her, and would not take it. It was not evident to me, however, that it increased her dyspnœa. I mention it, however, for this. She was so far advanced that she died a fortnight later.

Permanent conclusions cannot be drawn, it is obvious, from these cases; but they do indubitably show (1) that the oil may be inhaled pure for an almost unlimited time without producing any ill effects; (2) that it has an immediate beneficial effect in some cases of even the latest stages of "galloping" phthisis, as in Case 2; (3) that early phthisis is at least checked in its progress under its systematic use, and possibly, when other circumstances are favourable, even cured, as in Case 1. No doubt, innumerable fallacies may be urged as against these conclusions, and "the strong ass" of judgment is bowed, like Issachar, between the two burdens of *propter* and of *post*. But the cases at least render it imperative upon the profession to give the treatment an earnest, persistent, and effective trial, more especially in cases in the earlier stages.

Of the first, the most successful case, which was in my own belief, without any doubt, a cure, it may be said that the diagnosis may have been wrong. This is always possible. And as we know that Koch's bacilli are found also in healthy saliva and in bronchitic sputum, even this criterion fails. However, many bacilli were found here, and they diminished *pari passu* with the general improvement, conditions which militate against the view that this case was not phthisis. On the other hand, the patient was in most favourable conditions for diet, and she may be said to be one of the many (now) known cases of early recovery independent of drugging. However, I have never met with cases in which signs which had lasted so long disappeared so early spontaneously. Very little alteration was made in diet, and none in climate, while improvement began with the commencement of the inhalation.

Case 3 owes the retardment of the progress of the disease to the drug; she becomes sensibly worse on its withdrawal. Her indigence probably alone militates against greater improvement, and possible eventual recovery.

As regards the late stages of acute cases, it is obvious that though one might, by the microbicide, destroy all the bacilli, or hinder their multiplication, we have yet then to deal with the condition of suppuration which these have excited, and which the strength of the body may be insufficient to repair. Then the lardaceous degeneration and general impairment of absorptive power, the anæmia, and other damages, may any or all of them be beyond recovery. In such cases as No. 2 it is quite possible that the patient should be cured of phthisis and yet die of its effects—the cause may be destroyed, but the results continue. But if medicine is ever to avail, its aim must be directed first against the earliest link in the causation of the disease—the bacillus.

In *Diphtheria*, the greatest of all desiderata has always been such an antiseptic as this—one which may be fearlessly applied in the greatest quantity and the greatest frequency; which is innocuous, whether it be swallowed during its application, or be respired into the air-passages; and which, by its absorption into the blood, and its ready volatility, is enabled to penetrate to every recess, and be carried through all the tissues. Two cases of typical diphtheria in male adults, part of a small epidemic, some among the victims of which died with its worst features, have been treated solely by applications of oil of peppermint. Both these cases presented multiple ulcers on the fauces, uvula, tonsils, and retro-pharynx; in both cases these patches were covered with ashy-white membrane; and in both they had increased largely in size while under one day's observation, untreated. The pure oil was freely and copiously applied twice daily; the growth of the ulcers ceased, as it seemed, immediately, and on the fourth day in one case, and on the third in the other, all trace of membrane had vanished, and the ulcers had almost entirely disappeared. Coincidentally, general febrile symptoms present in both departed. Albumen was observed, I may add, in the urine of neither. This is probably to be accounted for by the rapid destruction of the local infection before it had time to prostrate the system by multiplication and damage the kidneys during excretion. These cases afford ground for believing, therefore, that this drug may be also a potent weapon in diphtheria. Recovering so completely and so speedily as they did, their progress resembles neither that of "ordinary" ulcerated pharyngitis, treated or not by the usual means, nor of diphtheria as it has progressed in cases I have seen treated by the inefficient local antiseptics in vogue.

Oil of peppermint has been in use as a carminative from time immemorial. Dr. Lauder Brunton's experiments[1] show how remarkable is its power of causing the absorption of flatus; they leave unexplained, however, its mode of action. Possibly some of it is due to its preventing ferment

[1] Pharmacology, p. 115.

changes set up by bacteria, which it kills. Dr. Brunton notes that the aromatic oils to which peppermint belongs have more marked effects on life the lower down in the scale it is placed. Thus, it kills leeches with convulsions, and, while Dr. Brunton states that it has no effect on beetles, I have found that cockroaches and other insects are readily destroyed by the vapour—about 1 part in 100,000 killing them in an hour with convulsions, ending in paralysis of first the last, and then the anterior limbs and appendages.

In neither Dr. Neale's "Digest" nor Dr. Waring's "Bibliotheca Therapeutica" is there any account of the use of peppermint as an antiseptic; but, in common with other essential oils, this use has probably been made of its virtues long since. The "herbs" of such great curative value when applied to the wounds of mediæval knights were those containing "aromatick" oils no doubt, and were very useful as antiseptics after a wound had been "rummaged," as by "Sir Baudewin of Flanders" in "Mort d'Arthur." From a mention of "clove-water" in Mr. Lawson Tait's interesting little book on Diseases of Women, it would seem that he, too, uses something of this kind, whether on æsthetic or scientific grounds one can only surmise. The piny odours of Arcachon and Bournemouth, and other phthisical resorts, would appear to owe their virtues to similar aromatic oils. The Chinese, I am told, repose great faith in peppermint, and it seems not to be misplaced. Hippocrates knew its value in colic, and recommended it for thrush. According to Laurin[2] it would cure nearly every disorder, from epilepsy to leucorrhœa. Celsus mentions it in cholera and in worms. These are all bows drawn at a venture, but we may quote as curious, in connexion with the last, and as important in itself, the observation of Babes,[3] who says of the essential oils of mustard and of peppermint: "One drop placed under a bell-jar covering a cultivation of cholera bacilli will kill both bacilli and spores in forty-eight hours."

NOTES OF A

CASE OF PHTHISIS TREATED BY PROFESSOR KREMIANSKI'S ANILINE METHOD.[4]

BY DR. J. ALBITSKI,
OF VALKI, NEAR KHARKOFF.

I HAVE been induced to write out the following case, which is that of my own wife, not merely as a grateful acknowledgment of Professor Kremianski's kind treatment, but with the desire that my professional brethren may be made acquainted with the details of so interesting a case. I may say that the whole course of the affection before and during the continuance of the treatment has been watched and verified by several other medical men.

My wife comes of a phthisical family. She enjoyed good health till her twenty-fourth year, when she was prematurely confined of an eight-months' child, from which time she began to cough. No treatment was adopted for four years, when she had an attack of hæmoptysis; her cough now increased and she suffered from some dyspnœa. The physical signs of phthisis were present, and the disease continued to advance, though with intermissions, in summer time. She was ordered expectorant, saline, narcotic, and alterative medicines; also quinine for the pyrexia. The medicine which appeared to suit her best was a combination of creasote, quinine, arsenic, and morphia in pills. Inhalations of turpentine and creasote with steam were also tried, and iodoform in considerable quantity was used, but her condition grew worse day by day. In this way four more years passed by; two children who were born during this time died of tuberculosis of the brain in their first year. In October, 1886, the time when Professor Kremianski first saw her, her condition was as follows:—Much emaciated; anæmic. No subcutaneous adipose layer. Muscular system atrophied and lax. Chest sunken both above and below the clavicles; right side dull; cracked-pot sound in the infra-clavicular region; râles over the whole lung; below the clavicle large râles and amphoric respiration; above it and over the rest of the lung bronchial respiration; left lung only affected in the upper part, where mucous râles were heard, the vesicular breathing being weakened. Liver and spleen enlarged. Albuminuria. Expectoration of a greenish-yellow colour, at times offensive, about eight ounces during the twenty-four hours. Temperature somewhat above normal in the morning, and from 102° to 104°, or even higher, in the evening; pulse about 120. Appetite very bad. Sometimes œdema of the feet and under the eyes. Every movement produced dyspnœa. Constipation alternating with diarrhœa. Almost constant epigastric pain. The sputum was found to contain immense numbers of Koch's bacilli.

Professor Kremianski ordered her meat powder (prepared according to a plan recommended by him, which consists mainly of drying the meat at a low temperature) as nourishment, acetanilide to reduce the pyrexia, and eucalyptus oil or oil of anise with pure aniline oil (aniline) for inhalation in the inhaler devised by him, the chief peculiarity of which consists in the large size of the tubes, which are nearly half an inch in internal diameter throughout. The proportion of aniline was a drachm to an ounce of the oil of eucalyptus or aniseed. The first night, after taking ten deep inhalations, the quantity of expectoration diminished to one-half, and it was white instead of green, there being but little pus mixed with it. Just at first the patient did not bear the treatment well, the meat powder producing sickness, and the eucalyptus appearing to irritate the air-passages. The meat powder was for a time therefore administered in enemata, two tablespoonfuls in a pint of milk being injected twice a day. Ten grains of acetanilide were given four or five times a day. Three minutes after each of these doses the cough was allayed, and the patient felt better. In this way the temperature was kept down to normal.

After about a fortnight the patient liked the inhalations so much that the inhaler was seldom out of her hands. She took from ten to thirty inhalations at a time; during the whole day she would take on an average about 400, the mixture generally used being an ounce of eucalyptus oil together with a drachm of aniline. Iodine or iodoform ointment, to which eucalyptus oil had been added, was rubbed into the chest, and fly blisters applied between the shoulder blades. One striking result of the treatment must be mentioned—viz., a blue, cyanotic-looking colouration, which affected the whole of the skin and mucous membranes, and which was probably due more to the large doses of acetanilide (which breaks up into aniline and other products) than to the inhalation of aniline. It passed off completely in two days, during which the aniline inhalations were stopped and the doses of acetanilide diminished. Three weeks from the commencement of the treatment the general condition had decidedly improved; the patient was able to take eight tablespoonfuls of the meat powder with kwass (a mucilaginous drink) and lemonade daily; the cough had decreased; the expectoration had not only diminished in quantity, but was almost free from pus. The treatment was persisted in throughout the winter, the bacilli in the sputum showing by their diminishing numbers the improvement in the patient's condition. At the end of the winter the râles had disappeared from the left apex, and the cavities in the infra-clavicular region could scarcely be detected. The rest of the lung was unchanged. The dyspnœa had quite ceased. At the commencement of the summer of 1887 the patient was better and stronger than she had been for four years. During the summer the inhalations were stopped and the meat powder given but seldom; the acetanilide was, however, given all through in doses of ten grains two or three times a day. During the year no less than 4 lb. of acetanilide had been taken and many ounces of aniline inhaled.

Since the autumn of 1887 the cough and expectoration have increased again, but the temperature keeps down and the strength and general condition is good. The eucalyptus inhalations have not appeared to suit the patient so well this winter as they did last year, so that another mixture is now used in the inhaler—viz., ol. menth. pip., 2 dr.; ol. anilini, 1 dr.; aq. dest., 1 oz. I have employed aniline inhalations in many cases of chronic phthisis, chiefly amongst the poor who come to the dispensary; and I have never seen any sign of aniline poisoning, the good results of the treatment having, on the other hand, rapidly made themselves manifest. Of course, I cannot give such patients meat powder; I let them have an inhaler and sufficient of the oils to last them for a week, and I give them ten grains of acetanilide every night, or, if they have fever, ten grains three times a day.

[2] Dr. Waring's Bibliotheca Therapeutica. [3] Les Bactéries.
[4] Abridged translation.

ON THE VALUE OF RESORCIN IN SOME GASTRIC AND CUTANEOUS DISORDERS.

BY EDWARD MACKEY, M.D., M.R.C.P.,
PHYSICIAN TO THE ALEXANDRA CHILDREN'S HOSPITAL, AND ASSISTANT PHYSICIAN TO THE SUSSEX COUNTY HOSPITAL AT BRIGHTON.

CHEMICALLY related to carbolic acid, and probably acting in a similar manner as a stimulant and disinfectant, resorcin has the advantage of being less irritant to taste and smell, as well as to mucous membranes, more readily eliminated, and less liable to cause toxic symptoms. The name has a curious origin, its first syllable, "res," representing its discovery in the resin of galbanum (fused with potash), and "orcin," referring to its isomerism with that litmus-derived substance. Hence Barth of Vienna compounded the word "resorcin," otherwise "resorcenal," known more precisely as "di-phenol," or "meta-di-oxylbenzene"—isomeric with hydroquinon, and with pyro-catechin $C_6H_4(OH)_2$, two atoms of hydrogen in the carbon nucleus being replaced by two of hydroxyl. It is now obtained from benzol and several other allied substances, in white, feathery, neutral crystalline needles and plates, soluble in water, alcohol, ether, and oils, not in chloroform. A good account of its chemical alliances will be found in Brunton's Pharmacology, chap. XXX.

As to its *external* effects, we know that a 1 per cent. solution will retard, and one of 2 per cent. will arrest fermentation, coagulating albumen. These strengths do not irritate the skin, but stronger solutions have a more or less irritant, and even caustic, effect. *Internally*, five-grain doses are readily taken in any simple vehicle without gastric irritation, and though the taste is harsh, it has been considered, by contrast with some other medicines, pleasant enough by many. I have not required to give larger doses, but in reports of the effects of from twenty to thirty grains we find resemblance to the effects of alcoholic and other stimulants—e.g., quickening of pulse, flushing, giddiness, and tinnitus, afterwards sweating and depression of temperature, increased secretion of saliva and of tears; dilatation of vessels and dyspnœa have also been described. Dr. Murrell, by giving thirty grains to an asthmatic patient, relieved the spasm, with induction of sleep and no ill effect; but after sixty grains there occurred giddiness, headache, and nerve excitement, followed by prostration and collapse, with temporary unconsciousness. In other cases paralysis has been noted, and in those of Dujardin-Beaumetz convulsion and other evidence of profound impression on nerve centres, as after toxic doses of carbolic acid. It is for such an impression, less in degree, and also for lowering high temperatures, that the drug was early used, and we have numerous reports of more or less success from it in enteric fever, erysipelas, pneumonia, intermittents, &c. From these, which are mostly in continental journals, the antipyretic power of full doses is evident; but what is less evident is any real advantage conferred by this temporary effect. It is not, therefore, in this direction that I have made my observations; nor, again, have I used it as a systemic disinfectant or "anti-zymotic"; but being impressed with the reports of its power in the local disinfection and healing of wounds, and discharging cutaneous and mucous surfaces, including that of the gastro-intestinal tract, I have carefully watched many such cases treated with it, and desire to place some results before the profession, being satisfied that we have in this drug a valuable adjuvant. The probability of this is suggested by the known good effects of creasote and carbolic acid, both of which have had, not without foundation, enthusiastic advocates of their power in gastro-intestinal catarrh, &c. It seemed to me that if we could have either of these so modified as to be better tolerated by the stomach and nervous system, we could hope for still further advantage; and I was quite prepared to accept the favourable reports of Andeer as to the value of resorcin in gastric ulcer, and to take an early opportunity of verifying them. The following case, the first in which I prescribed the drug, may be related in some detail as a type of others.

TABLE OF CASES.

Cases.	Initials.	Sex.	Condition.	Age.	Occupation.	Special symptoms.	Duration of treatment.	Result.
1	A. C.	F.	Single	25	Nurse	Tracheotomised for diphtheria in childhood; typhoid two years ago; extreme anæmia; hæmatemesis.	2 months (iron added)	Recovered *pro tem.*, but relapsed on work
2	S. C.	F.	,,	30	Cook	Pain very severe; moderate hæmatemesis.	3 months	Recovered
3	L. M.	F.	,,	30	Servant	Hæmatemesis twice; melæna; severe pain.	12 months	Much relieved
4	F. H.	F.	,,	28	Housemaid	Gastric catarrh; vomiting; no marked pain or bleeding; anæmia.	1 month (with iron)	Recovered
5	L.	F.	Married	27	—	Severe gastric catarrh; headache.	1 month	Much relieved
6	J. J.	M.	—	52	Labourer	Gastric catarrh; headache.	1 month	,,
7	T.	F.	Single	30	Servant	"Nervous" insomnia.	1 month (with bromide)	Relieved
8	G.	F.	Married	41	—	Gastric catarrh.	3 months	Much relieved
9	P.	F.	,,	—	—	Ditto.	—	,,
10	C.	F.	,,	50	—	Ditto.	—	,,
11	C.	F.	,,	—	—	Ditto.	—	,,
12	E.	F.	,,	24	—	Ditto.	—	,,
13	T.	F.	,,	48	—	Gastric catarrh; pain and distension, largely neurotic.	—	Not relieved
14	E. B.	F.	Single	18	Laundress	Gastric catarrh; slight hæmatemesis.	—	Much relieved
15	M. B.	F.	—	—	—	Chronic and severe gastric catarrh.	—	,,
16	T.	F.	Married	30	—	Severe gastric catarrh.	—	,,
17	A. S.	F.	Widow	34	—	History of profuse hæmatemesis—rectal feeding; now severe pain and catarrh.	12 months	,,

A. G——, lady's maid, single, aged twenty-five, came for advice on Dec. 7th, 1885, having that day brought up half a teacupful of dark blood; she stated that more or less had come up at intervals during the past six or eight months, whilst she had been subject to severe epigastric and inter-scapular pain, made worse by food, of which she could take but little. Nausea was frequent and distressing; she was anæmic and giddy, thinner and weaker than formerly; menstruation was irregular, and had just occurred after two months' interval. She had night sweats, and frequently a cough, but this had no definite relation to the bleeding, and there were no physical signs of chest disease. The epigastrium was extremely tender. She showed a prescription for the medicine then being taken—bismuth, soda, and aromatic bitters; also one for acid glycerine of pepsin. She had been under competent medical treatment with similar remedies in Clifton for the last six months, with only temporary relief. Her mistress, aged eighty, had come to Brighton for the season as usual, to a house four or five storeys high, and the present relapse of hæmorrhage was fairly attributed to unusual fatigue of stairs &c. I ordered more rest, small quantities of peptonised food, and five

grains of resorcin in glycerine-and-water thrice daily. On Dec. 15th she reported herself much better; there had been no bleeding and scarcely any pain or sickness till the previous day, when some relapse followed extra work and worry consequent on her mistress's sudden illness. She volunteered the statement that she felt more relief from this than from the other medicines; could now take fish and some solids without pain. She was ordered to continue the resorcin, and to take an occasional pill of cerium oxalate for the special symptom of vomiting. She went on well for about a week, when the mistress was taken ill again in the night, and the girl had to wait on her for many hours at a time, going much up and down stairs. The following evening I found her very prostrate, with a stream of semi-clotted blood flowing from her mouth, whilst a quantity had been vomited. For the moment the necessity was to arrest hæmorrhage. Ice was therefore given, and a disc of sclerotinic acid by the mouth and another by the skin; afterwards a few doses of acid and opium. Next morning the resorcin was resumed. With more care as to rest and diet she steadily improved and gave no further anxiety. In three days she was up; in a week she was again able to take solids and to go out; and in a fortnight she travelled back to Clifton, continuing steadily the same remedy. She improved in health in all respects, and when I saw her again during last season she had had no relapse and considered herself strong.

Other cases of gastric ulcer or catarrh, of which I retain sufficient notes to justify a conclusion, are seventeen in number, presenting varying degrees of chronicity and severity. If I say they were all women but one, and all hospital patients, it will sufficiently recall the class of cases so frequent amongst the poor in out-patient departments, with such symptoms as pain, pyrosis, vomiting, distension, and all the consequences of imperfect digestion and of fermentation of food. Most of the patients had taken also at various times bismuth, prussic acid, alkalies or acids, rhubarb, &c.; and only one of them—a woman at the climacteric period—failed to attribute decided benefit to the resorcin and to ask again for it. I may add that I have met with no drawbacks in its use, such as causing pain, vomiting, or constipation; in a few cases, however, when giddiness might have been due to it, I have lessened the dose to three grains; the usual one was four or five grains in one tablespoonful of chloroform water, to which plain water would be added. The accompanying brief table gives the ages &c. of the cases referred to, and I will reserve for another paper observations on the local use of the same drug in some cutaneous disorders, &c.

P.S.—Since the above was written I have received several corroborative cases from medical friends and many letters from different parts of the country on the subject, showing much interest in it. Without wishing to seem to commend this remedy as always the most suitable, yet there is good evidence that it has been effective in many hands, and I trust that the foregoing notes will be accepted as sufficient guide to my correspondents for further observations.

STRICTURE OF THE URETHRA; PROSTATIC CALCULUS; PERINEAL SECTION.

BY FRANCIS W. JOSHUA, L.R.C.P., L.R.C.S. ED.,
SURGEON TO THE GREAT MALVERN DISPENSARY.

THE following case, from the unusually large size of the calculus, is, I think, worthy of record.

J. F——, aged thirty-seven, signalman. Married; no family. Father and mother living. Family history good. Lived most of the early part of his life in Bridgnorth, working on the line. Had good health up to 1868, when he contracted gonorrhœa, and again in 1870 and 1873. Stricture followed, and instruments were passed. In 1875, when at work in Worcester, he found a difficulty in micturating, and noticed a good deal of sediment in his urine after standing. At that time a small, smooth, rounded stone as large as a pea was voided. He went into the infirmary for three weeks; instruments were passed and the stricture relieved, but no stone was discovered, and he was discharged. A week after leaving the infirmary two small stones were passed which had rugged surfaces, and blood followed. In 1883 he again had difficulty in urinating, and noticed a good deal of matter in the urine, and a glairy discharge from the urethra. In August, 1884, two more stones were passed, and an abscess formed in the perineum, which was opened, and he was laid up for seven weeks. His health remained indifferent until February, 1886 (his work lay then in Malvern), when another abscess formed, and he was attended by the company's surgeon. Another small stone was passed; his urine was frequently bloody; he was getting rapidly worse, and had lost twenty-eight pounds in weight.

The patient consulted me at the end of March, 1886; his condition at that time was most distressing. The perineum was greatly indurated; there were three sinuses discharging a thin unhealthy matter, also an abscess at the posterior part of the scrotum; there was constant desire to pass urine, great difficulty in doing so, and it was loaded with pus. I succeeded in passing a No. 6 bougie through two strictures, one two inches from the meatus, the other in the more usual place just posterior to the bulbous portion of the canal. After passing this last stricture the instrument struck on a small rounded stone lying apparently in a sac in the membranous part of the urethra. This stone would occasionally drop into the canal during micturition, stop the stream, and then fall back again. On examination per rectum, nothing definite could be felt. He complained of weight and pain in the perineum, was very weak, and declared his life was a burden to him. On consultation with Dr. Cooksey, it was decided to try to improve the man's health by rest, fresh air, and tonics, and then perform perineal section. Accordingly, on May 14th, Dr. Stanley Haynes having given chloroform, I passed a No. 8 Syme's stricture staff, laid open the abscess and sinuses, divided the posterior stricture, the tighter of the two, and removed a stone the size and shape of a marble, lying in a sac in the posterior part of the membranous urethra. On inserting my finger into the wound, I found the position of the whole of the left lobe and posterior part of the prostate to be occupied by a calculus. I prolonged the incision to the neck of the bladder, and removed it in seventeen portions. The bladder was healthy. The operation lasted forty minutes; the loss of blood was trivial. I tied in a No. 9 catheter, and packed the wound with lint dipped in carbolic oil. The portions of stone weighed 1843 grains; they were facetted, the whole being enveloped in thin membrane. On the evening of the 15th the temperature rose to 102°, and vomiting set in, which lasted for twenty-four hours, and only ceased on removal of the catheter. On the 30th the catheter was replaced for twenty-four hours, as the whole of the urine was passing through the wound; this again sent the temperature up, but it came down to normal on its removal. And now for the first time a few drops of urine passed daily by the urethra. The patient made a slow but uninterrupted recovery from this date, the wound healing kindly, and on July 26th he went away for change, returning to work at the end of August in perfect health, passing a good stream, the urethra permitting a No. 10 bougie to pass with ease.

Remarks.—The largest prostatic calculus I find recorded is in "Druitt's Vade-mecum"; it weighed 1681 grains. In mine, as in the above-mentioned case, the whole portion of the prostate gland, the position of which was occupied by the stone, had become absorbed, only a membranous envelope to the calculus remaining. The different portions of the calculus were facetted, and dark-grey in colour, some parts almost black; they adhered firmly, and it was with great difficulty they were separated from one another—a process necessary to their removal. The bladder was pushed up by the enlarged and elongated prostate and its contents. The calculus was composed of phosphate and carbonate of lime. My sincere thanks are due for the able assistance rendered me by Drs. Cooksey and Stanley Haynes.

OBLITERATIVE ARTERITIS.

BY W. J. WALSHAM, F.R.C.S.,
ASSISTANT SURGEON TO ST. BARTHOLOMEW'S HOSPITAL.

IN THE LANCET of Feb. 11th Dr. Hadden briefly describes another case of this rare and interesting disease, similar to the two recorded in the seventeenth volume of the Clinical Society's Transactions by himself and Mr. Pearce Gould. Dr. Hadden says: "The three cases which I have discussed have so many clinical features in common that I cannot help thinking that they form a distinct morbid class, since they differ in many important points from the

few instances of vascular obstruction recorded under the name of arteritis obliterans." It may be of interest if in connexion with these three cases I call attention to a fourth case, which was under my care during the autumn of 1885 at St. Bartholomew's Hospital, and was shown by card at the Clinical Society in November of that year.[1] In my patient, as in Dr. Hadden's and Mr. Gould's, there was no history of syphilis or alcoholism, and no cause could be assigned. The right arm was also the extremity affected, and the disease spread from below upwards, whilst the patient was under observation, reaching as high as an inch below the clavicle. Further, there was the same indurated, tender, and pulseless condition of the radial, ulnar, brachial, and lower portion of the axillary arteries, and the subclavian artery formed an aneurysmal-like swelling, the size of a small hen's egg. The swelling could be emptied by pressure, and there was no bruit heard in it. The hand and forearm were cold, and the tips of the fingers cold and bloodless. There was no swelling of the hand or forearm, and no engorgement of the superficial veins of any part of the limb. The pain in the hand and forearm was intense, and the disease, after lasting for several months, subsided spontaneously. So far the four cases may be said to be absolutely identical. In my case, however, a faint pulsation was ultimately detected in the affected vessels, and no gangrene occurred, as in two of Dr. Hadden's cases. The fingers, moreover, were flexed and rigid, and any attempt to straighten them caused the most intense pain. Another point of difference lay in the fact that the dilatation of the subclavian artery varied from day to day, and even at times from hour to hour. One day or hour it was the size of a small hen's egg and pulsated violently; the next, no perceptible difference between it and the left subclavian vessel could be detected. Further, after the acuteness of the symptoms had worn off, slight pulsation could on some days be felt in the radial, whilst on others there was no trace of such even on the most careful search. During the time he was under observation the right lobe of the thyroid became enlarged.

I fully agree with Dr. Hadden that the etiology and pathology of this curious and most interesting affection call for further investigation. For my own part, I cannot help thinking that it will be found to depend upon some nerve lesion. The absence of the signs of inflammation except pain; the diurnal and at times hourly variations in the size of, and character of the pulsation in, the subclavian artery; the fact that the pulse could at times be felt in the affected arteries, whilst at other times it was absent; the enlargement of the thyroid gland; and the great pain not only along the course of the vessels, but on attempting to move the fingers and on making pressure on the back of the hand—are some of the chief reasons which I think support such a view. May not the disease be of the nature of a peripheral neuritis involving chiefly the nerves supplying the vessels, rather than an inflammation of the vessels themselves? This question, I think, can hardly be answered till an opportunity of making a post-mortem examination has occurred.

A Mirror
OF
HOSPITAL PRACTICE,
BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

ST. MARY'S HOSPITAL.

A CASE OF TRAUMATIC HYDRO-PYO-PNEUMOTHORAX, WITH GANGRENE OF LUNG; RECOVERY; REMARKS.

(Under the care of Mr. PAGE.)

As Mr. Page states in his remarks on this interesting case, the escape of air into the pleura is uncommon as a complication of fracture of the ribs, its escape into the subcutaneous tissues being much more commonly met with. The way in which it was here produced accounts to a certain extent for its presence in so young a subject, pneumothorax as an immediate consequence of fracture of the ribs being extremely rare in children. The clinical history proves clearly the pathology of the case, and the separation of a localised patch of gangrenous lung must be remembered in the future as a possible secondary cause of pneumothorax.

A. S——, aged thirteen, was admitted on July 27th, 1887, having been run over by a cart, which was said to contain three or four hundredweight of iron. He was in a state of collapse, and the direction of the wheel which passed over him was shown by a broad band of contusion, reaching from just above the left nipple upwards across the front of the chest, and ending over the sternal end of the right clavicle. At this point the bone was broken. There was no certain evidence of any fracture of rib, no hæmoptysis, nor any special indication, either on auscultation or percussion, that the lung itself had been injured, but there was very obvious difficulty in breathing.

On the following day the boy had rallied from the collapse; but his general condition pointed to some grave thoracic lesion, and he complained of a great deal of pain in the left submammary region. It was further noted that the right chest moved much more freely than the left in breathing, and that the abdomen, though somewhat hard and tender, yet nevertheless distinctly moved. Respirations were 84 in the minute, and his countenance evinced the greatest anxiety and distress. Nothing, however, was to be made out by percussion or auscultation, and it was thought just possible that his difficulty in breathing might be due to undetected fracture of a left rib, and to the severe muscular bruising which the chest wall had sustained. In this opinion Mr. Page was supported by Dr. Phillips. His temperature in the evening had risen to 102·6°. He had vomited twice, and the vomit contained blood, which had in all probability come originally from the lung. Next day (the 29th) the morning and evening respirations were 108 and 60; pulse 108 and 120; temperature 101° and 102°. The left side of the chest was somewhat dull on percussion, and a slight pleuritic rub was detected just outside the nipple. On the 30th he was rather better; the respirations had fallen to 60 and 52, the pulse to 120 and 102, but the temperature was slightly higher. His anxiety was markedly less. The 31st also saw improvement in many respects, and on Aug. 1st the respirations were down to 52 and 44. The dulness on the left side, however, had now decidedly increased, vocal fremitus and breath sounds were gone, and on Aug. 2nd the apex beat of the heart was noted as being in the fourth right space, one inch from the sternum. The pulse was 130, respirations 44 and 48, and the temperature 99·8° and 99·6° in the morning and evening respectively. It may here be remarked that the difficulty in breathing rendered it impossible to apply any means for keeping the broken clavicle in position.

There being no question as to the presence of fluid in the left pleura, Mr. Crowle on Aug. 3rd withdrew by aspiration twenty ounces of sanguineous serum. The temperature rose in the evening to 103°. On Aug. 4th, 5th, and 6th he was decidedly better, and on the last of these days his respiration had fallen to 20 in the minute. He was, however, very much troubled with cough, especially on the afternoon of the 7th, when it suddenly became much worse. The house surgeon immediately requested Dr. Cheadle, who was in the house, to see him, and he on examining discovered that there was pneumothorax on the left side. The pleural cavity now contained both air and fluid, the latter reaching as high as the sixth rib. During the next few days there was marked amphoric breathing, though in himself he was manifestly rather better, and was able to take food well. The heart still lay to the right of the sternum. This new feature now arose in the case, that on Aug. 9th there was much purulent expectoration. On the 10th this was noted as being thick and yellowish-green in colour, and on the 11th and 12th it had begun to have a distinctly offensive smell. On the 13th the smell of it was so much worse, and his general condition was so decidedly going back (he was not able to eat and was obviously very ill), that Dr Lees was called in consultation to see him. He fully agreed in thinking that there was a collection of decomposed pus in the pleural cavity, associated in all probability with some gangrene of lung, and that the right thing to do was to lay open the pleura. This was accordingly done at once by Mr. Crowle, who inserted a large tube in the fifth left interspace, in the mid-axillary line. The pus evacuated to the amount of several ounces, was very offensive. The boy now began to improve at once. Pus discharged freely

[1] See Clin. Soc. Trans., vol. xix.

from the side, and day by day became less and less offensive until it was free from small. Temperature and respiration alike fell, and he was eating and sleeping well. On the 18th there was a discharge of some six or seven ounces of pus, and with it came a solid leathery substance of ashy colour, which when laid out was about the size of three postage stamps, and on microscopical examination was proved to be a piece of pleura with lung tissue attached. From this time onwards both local and general conditions rapidly improved. The tube was finally removed on Sept. 9th. On the 11th he sat up. On the 21st there was distinct evidence of lung expansion on the left side, and the apex of the heart was two inches below and to the right of the left nipple. He left the hospital on Sept. 23rd.

Dr. Lees again examined the patient on Nov. 5th, when the circumference of the right chest just below the nipple-line was 12⅜ in., that of the left 11½ in. The left chest was a little flattened, both above and below the nipple. Resonance was good down to one finger's breadth below the scar of the incision, and down to the angle of the scapula behind. Below these points the percussion note was dull. In ordinary respiration the breath sounds could be fairly heard as far as the nipple, while on deep inspiration they were audible as far as an inch below the angle of the scapula. Recovery seems to-day to be complete, and the boy looks and feels perfectly well. (The patient was shown at the Harveian Society on March 15th.)

Remarks by Mr. PAGE.—I have thought this case worthy of being brought forward, not alone because it is an admirable instance of the reparative powers of youth, but also, and more especially, because it is an example of one of the more uncommon ways in which pneumothorax may be the result of injury. Escape of air into the pleural cavity, in consequence of injury, is usually an immediate or very early phenomenon; but even then it is one of the rarest forms of surgical lesion. We are all familiar with the chest-wall emphysema which sometimes follows fracture of rib, and it must have struck many of us as remarkable that in such cases, where the presence of emphysema has removed all doubt as to injury of both visceral and parietal layers of the pleura, there has been no escape of air into the pleural cavity, nor any collapse of lung. Emphysema after fracture is, indeed, very common; pneumothorax very rare. We owe to Dr. Samuel West an explanation which seems to account satisfactorily for this paradox. The question occupied a large share of his Bradshaw Lecture on Pneumothorax last August, and it will be remembered that he therein set himself to expound this hitherto unexplained phenomenon. Dr. West referred to a series of carefully designed experiments, whereby he proved that the pleural surfaces were kept in apposition, not, as had been thought, by atmospheric pressure, but by a force which for want of a better term, nor using the term in too technical a sense, he ventured to call "cohesion," a force of no small power, and one not easily overcome. His observations established the "existence of a force between the pleural surfaces much in excess of the elasticity of the lungs, and sufficient therefore to maintain the lungs in apposition with the walls of the thorax, even when air has free access to the pleural cavity"; and he goes on to say that "pneumothorax can no longer be regarded as a condition to which there is an inherent tendency in the healthy body, but, on the contrary, as a condition brought about by the forcible separation of the pleural surfaces." It is exactly analogous to the emphysema of the subcutaneous tissue of the chest wall, distension of which may be caused by a force much less than that required to separate the layers of the pleura. This chest-wall emphysema may therefore in reality be a protection against pneumothorax, the air making its way in active expiration in the direction of least resistance beneath the skin rather than between the pleural layers. We see, therefore, that it is only in exceptional cases that injury to the wall of the thorax is likely to be of such a nature as there and then to separate the pleural surfaces, to overcome the cohesion of the pleural layers, and prepare a way for the forcible expiration of air into the pleural cavity when the visceral pleura has been wounded at the same time by an in-driven rib or ruptured by the violence of some contusion or blow. Profuse hæmorrhage may likewise act in the same manner. A case of this kind, which has already been published, came under my care a few years ago. I saw the accident. A healthy young man fell from a cart in front of the wheel, which crushed against, if it did not actually pass on to, his chest. From his appearance I think that pneumothorax probably occurred immediately, but examination was impossible on the road-side. At any rate, there was pneumothorax with collapse of lung within two hours of the accident, when he reached the hospital, and when relief was promptly given by use of the aspirator, which withdrew both air and blood from the pleura. In the present case, however, the pneumothorax arose in a wholly different manner. A severe contusion caused a portion of lung and overlying pleura to slough, and air was forced through the opening thus made into the pleural cavity, the serous surfaces having been already separated, and the force of cohesion having been already overcome by the effusion of fluid from traumatic pleurisy. Another point of interest in the case is the spontaneous disappearance of all fetor in the pleural pus after draining the pleura—a result, indeed, such as is usually seen in cases of the kind. Washing out the pleural cavity is not free from danger, and is quite unnecessary; and it is well to remember that free drainage and perfect evacuation of the fluid may alone suffice to get rid of fetor and bring about a perfectly healthy condition of the purulent discharge.

LEEDS GENERAL INFIRMARY.

LARGE HYDATID TUMOUR OF LIVER CONTAINING VERY NUMEROUS SECONDARY CYSTS; INCISION; RECOVERY; REMARKS.

(Under the care of Dr. CHURTON and Mr. MAYO ROBSON.)

P. W——, aged nineteen, a leather dresser, was admitted on Sept. 9th, 1887, for pain and swelling in the abdomen, with some prostration. Temperature 101·2°. The abdominal swelling was continuous with the liver; it extended to the right groin and two inches to the left of the middle line. There was a feeling of fluctuation on palpation, and of resilience on percussion. The liver dulness in front extended an inch higher than is normal. No gross disease in other organs. He said he had had a short illness when with his militia regiment at Halifax two months previously, but felt quite well until a fortnight ago, when he had headache. About a week afterwards he noticed the tumour; some twelve months before, however, he had noticed some enlargement of the abdomen, but much less than at present. The pain began five days previously to admission. During the last six days the tumour had much increased in size.

The foregoing account is taken from notes by Dr. Wardrop Griffith, then resident medical officer, who summoned Dr. Churton to see the patient on the evening of his admission. The tumour was aspirated at once, but when two ounces of clear fluid had been drawn the outflow ceased, a shock being given to the needle as of something striking it. The fluid was that of a hydatid cyst. Next evening the patient's temperature was 103°. On Sept. 11th, therefore, Mr. Mayo Robson was asked to see him, with a view to operation; and upon his agreeing that the case was suitable and urgent, he kindly proceeded to operate without delay. It then became apparent that the cessation of the flow during aspiration was due to the fact that the secondary cyst punctured had been emptied, and that the shock to the needle was caused by one of these multitudinous cysts impinging upon it. The precise reason for the pyrexia and prostration did not appear; there was no suppuration; no peritonitis. Nerve tension, with pressure upon and displacement of neighbouring tissues and organs, may perhaps have been the cause; the growth of the tumour had recently been, it was said, very quick. A description of the operation is furnished by Mr. H. A. Smith, then Mr. Robson's house surgeon.

Under chloroform and with the usual antiseptic precautions, the skin having been thoroughly cleansed with turpentine, Mr. Robson made an incision through the outer side of the right rectus muscle about three inches below the costal margin. The tissues were carefully divided on a director. The peritoneum having been opened, the cyst was exposed. An aspirator needle was plunged in, sponges being packed round to prevent any fluid passing into the peritoneal cavity. The needle quickly becoming blocked, an ovarian trocar was tried, but the fluid began quickly to escape, so the cyst was incised for about half an inch or more with a scalpel, and its margins held up with clips. Sponges prevented any escape into the abdominal cavity. Pellucid globular cysts began to pour out from the tumour;

these cysts varied from the size of a pin's head to that of a tennis ball. Pressure on the abdominal wall and the use of a lithotomy scoop hastened their evacuation. The edges of the opening in the cyst were now stitched to the margin of the abdominal wound by silk sutures, the stitches being so inserted as to include the peritoneum. The abdominal wound was closed up to the mouth of the cyst. The cavity was now cleared of all remaining cysts and collapsed cyst walls, yellow and green in colour, and was then irrigated with boracic lotion, which washed out a few more small cysts. Two large drainage tubes were inserted, one passing into the upper end of the cavity, the other passing downwards. The wound was dressed with sal-alembroth gauze and salicylic wool, a many-tailed binder fixing all in position. A sixth of a grain of morphia was given when the patient had been got into bed. The cysts filled a large washhand basin, and were in countless numbers, many hundreds; 120 oz. of fluid was measured.

The progress after operation was uninterrupted. It was necessary to dress the wound daily on account of the free discharge. At the end of a week antiseptic dressings were left off, and the wound was syringed out daily with iodine solution (one drachm of the tincture to one pint of water). The discharge gradually lessened after becoming purulent, and as it diminished the tubes were shortened and ultimately left out on the twenty-second day. He left for a convalescent home on the twenty-seventh day with a small superficial sore dressed with boracic ointment. On his return at the end of a month, he was in excellent health, a scar below the right costal margin being the only trace of his late trouble.

Remarks on the operation by Mr. MAYO ROBSON.—Hepatotomy may be performed in one of two ways: (*a*) In two stages, as advocated by Mr. Barwell,[1] who incises the parietes, stitches the cyst wall to the margin of the incision, and then opens the cyst after a few days. Or as practised by Graves, who, after exposing but not opening the peritoneum, packs the wound with antiseptic gauze, and then after a few days incises the cyst. (*b*) Hepatotomy, at one operation, as practised so successfully by Mr. Lawson Tait, is, with due precaution, an operation as satisfactory as need be desired. It is fully described in the case I have read. The principles are the same as in hepatotomy for abscess; but the daughter cysts require to be removed by some instrument. Mr. Thornton, in one case, after emptying the cyst and sponging out the cavity with tincture of iodine, stitched the margins together and closed the wound, relying successfully on strict antisepticism. The reasons for selecting this operation of immediate hepatotomy in this case were the urgency of the symptoms and the magnitude of the tumour. Early operation is advisable in all cases of hydatid tumour on account of the dangers of suppuration or of rupture, and, as there are so many methods of treatment available, it becomes an important question to decide which is the best. Should Dr. Sennett's operation of perchloride injection prove as successful in the hands of others as he has found it, it would seem to offer us a safe means of cure; but further experience of it is required before a decision can be arrived at. Dr. Arthur Sennett (THE LANCET, June 18th, 1887) says that out of 100 cases which he has operated on by tapping and completely emptying the cyst there have been ten deaths, and that he believes this to be an average result of cases thus treated in Australia. Not being satisfied with his results, he has adopted the following treatment. By means of a large hypodermic syringe he withdraws about two drachms of fluid from the cyst, and then injects an equal quantity of a solution (1 in 5000) of perchloride of mercury. After a year's trial of the method, he states: "The result of each case has been satisfactory; no suppuration has resulted, and the cyst has gradually contracted." Bardeleben, at the Congress of German Surgeons, spoke of having treated forty cases with uniform success by means caustic (Vienna paste), which perforated the abdominal wall in from six to nine days, causing adhesion as it advanced. Aspiration in the case of unilocular cysts is, as a rule, efficient, and, although it is occasionally followed by serious symptoms, it is the method which will usually be resorted to at first; that failing, as in the case related, where there were multitudes of daughter cysts, hepatotomy in two stages if there be time, or immediate hepatotomy if the symptoms be urgent, will prove an efficient mode of treatment.

[1] Brit. Med. Jour., Jan. 29th, 1887.

Medical Societies.

PATHOLOGICAL SOCIETY OF LONDON.

Osteitis Deformans.—Transverse Furrows on the Nails.—Exostosis.—Inoculability of Lupus.—Sarcoma of Urinary Bladder.—Tubercular Disease of Suprarenal Capsules.

AN ordinary meeting of this Society was held on Tuesday last, Sir James Paget, Bart., F.R.S., President, in the chair.

Dr. GOODHART showed a specimen of Osteitis Deformans. The chief feature during life was the enormous size of the head. For four months before death the patient had lost flesh and strength, suggesting visceral cancer. It appeared that for fifteen years the head had been growing larger, and a year ago Mr. Owen Palmer found the measurement twenty-two inches and a half, and this increased by three inches in one year. The clavicles were curved and the thorax laterally compressed. The skull was very heavy, soft, and thick; the clavicles and the first rib were thickened, as well as the alæ of the ilia. The pleuræ, liver, mediastinal glands, and abdomen contained large tumours. These circumscribed tumours occurred in the spleen, giving rise to so-called "hardbake" spleen of Hodgkin's disease. The new growths were more fibrous than ordinary tubercular tumours, and like lymphomata. The great interest consisted in the association of Hodgkin's disease with osteitis deformans. The latter disease appeared to him to be as much a tumour as an inflammation.—Mr. F. S. EVE asked whether there was any evidence of general calcareous degeneration; in one case nearly all the connective tissue had become calcified—Mr. CLUTTON maintained that the disease was an osteitis, and pointed out that cancer was only rarely associated with it.—Mr. HADDEN spoke of cases of acromegaly, in which the face, hands, and feet were overgrown in their soft and hard tissues, as described by Mairet.—Sir JAMES PAGET believed that acromegaly was a completely different disease from osteitis deformans, for there was a maintenance of the mutual symmetry of form. A larger number of cases of osteitis deformans were associated with cancer than Mr. Clutton supposed; but it was most probably an accidental mingling of the two diseases.—Dr. SAMUEL WILKS referred to a case seen many years ago in which a young woman's hands, feet, nose, and mouth grew enormously, associated with a tumour of the brain, causing blindness. Probably this was acromegaly.—Dr. COUPLAND narrated a case of acromegaly in a man.—Dr. GOODHART, in reply, said there was nothing in the nature of general calcification, and he agreed that Mr. Clutton under-estimated the frequency of occurrence of tumour.

Dr. SAMUEL WILKS showed a drawing of Transverse Furrows on the Nails occurring in a man aged fifty, who had suffered from nothing except sea-sickness on two separate occasions—August 28th and Oct. 8th,—on each occasion for three days; the two furrows would exactly correspond in date to those furrows in the nails, it being assumed that the nail took about six months to grow. He found it difficult to explain the meaning of these furrows, for though some illnesses appeared to induce them, others equally severe did not. The changes of the hair were analogous in kind to the changes in the nail. Certain markings or rings on the cow's horns after calving were alluded to, and also markings on the hoofs of horses generally due to local disease.—Mr. BLAND SUTTON spoke of a young lady who had had four months before a severe illness, probably accounting for the furrowed nails of the fingers. He had heard that game fowls and birds which had suffered from a severe winter had their feathers stunted, with the barbules defective. Well-feathered wings obtained if the weather was mild. Similarly hawks, kept in cages and poorly fed, in the following spring showed defective and stunted feathers. In cattle the rings were well marked, if in calving the cows had what the stablemen called "a bad time of it." In birds the beaks became softened, probably from the want of nourishment and other bad hygiene.—Mr. BULL averred that each calf left a ring on the cow's horns, and these rings were sometimes filed, with fraudulent intent to pass off an old cow as one which had calved but once.—Mr. SEDGWICK spoke of cases of transverse furrowings of the nails of the fingers occurring in a mother and two daughters; in the latter the age of fifty-four was the period at which the furrowing commenced. The cases were described thirty-one years ago in a paper on Heredity by him.—

Mr. STEPHEN PAGET said that the hair grows longer on one side of the body (head and limbs) according as it is more used; in his own person the left-sided growth predominated, he being largely left-handed.—Mr. BOWLBY always considered that nerve injuries were the chief causes of curved and furrowed nails, and he felt perfectly certain with Dr. Weir Mitchell that the serious illness, if it involved the nerves, would be followed by curved, furrowed, ridged, and fibrous nails.—Sir JAMES PAGET remarked on the remarkably short illness in Dr. Wilks' case; he suggested that the nails might be found to be a delicate test or barometer of nutritional changes.

Mr. BLAND SUTTON exhibited a specimen which had been sent to him by Dr. Rundle of Truro, who described it "as resembling an ossified bird's head." Dr. Rundle was quite sure it was not artificial, as the source whence it was received was above suspicion. There was no difficulty in determining the nature of the specimen; it was an osteoma connected with the fin-ray of a fish, probably Ephippus. Tumours of this nature connected with the fin-rays of this species of fish were first described by William Bell (the original specimen is preserved in the museum of the Royal College of Surgeons) in a paper communicated to the Royal Society in 1793. The College museum also contains a score of these tumours, nearly all of which are Hunterian. The tumours are very characteristic: they are situated at the end of a fin-ray, and in section the ray can be clearly defined as it runs through the tumour. Its exterior is smooth, hard, and like ivory. Articulating with it by means of a shackle-joint is one, but usually two, small rays. Cuvier states that these bones are common in osteological collections; they are brought home by travellers who have eaten of these fish and preserved the bones as curiosities. No explanation had been offered of this curious condition. Bell states in his original description of this fish that it is frequently caught at Benevolen and several other parts of the west coast of Sumatra. Many of the bones had tumours in the first fish Bell saw; he thought they were exostoses arising from disease, but on dissecting a second found the corresponding bones had exactly similar tumours, and the fishermen informed him that they were always found in this fish.

Mr. EVE read a paper on Experimental Observations on Lupus. The author stated the chief facts for and against the theory that lupus is a local tuberculosis. The tubercular theory had been opposed by Kaposi, Schwimmer, and others. Schwimmer urged, among other objections, that, while the inoculation of guinea-pigs with lupus caused general tuberculosis, lupus, as such, had never been produced in animals. Leloir failed to inoculate rabbits with lupus. The author had in two instances (first early in 1886) succeeded in producing a lupoid ulceration of the ear of rabbits by inserting portions of the diseased tissue beneath the skin. A spreading ulcer covered with a dry scab formed, and similar ulcers developed at a distance from the primary one. Cicatrisation took place after some weeks, and on killing the first animal no visceral lesions were found. He had inoculated rabbits from other cases, but only small rapidly-healing ulcers or cold abscesses had been set up. Passing lupus through a guinea-pig in one instance did not increase its virulence. Owing to the higher and lower degrees of susceptibility of guinea-pigs and rabbits to tuberculosis, the inoculation of lupus produced general tuberculosis in the former and a local disease similar to lupus in the latter. Equally wide diversities were met with in the same subject in man as these cases of lupus associated with phthisis or local tuberculosis, such as spinal caries. The production of lupus as such in animals was another point in favour of the view that it is a modified tuberculosis of the skin. Mr. Eve then showed three specimens of lupus and tuberculosis of the hand, which might be taken to indicate the close relations of those affections of the skin. Specimen 1 was a raised plaque, the size of half-a-crown, on the dorsum of the hand of a boy with spinal caries. It was not ulcerated, and had remained unchanged for some months. The microscope showed merely a formation of granulation tissue in the corium. The disease of the skin was probably secondary to that of the spine. Specimen 2 was a nodule removed from the hand by Mr. Bryant. It had microscopically the structure of reticular tubercle. The patient, aged twenty-six, observed a growth four years before; this was removed two years and a half later, and subsequently the nodule soon appeared. Specimen 3, an old preparation from the College museum, was originally described as probably epithelioma. Recent examination showed distinct tubercles with giant cells in the corium and a marked papillary thickening of the cuticle. No history was obtainable, but the disease was probably of long duration, for the ring finger had apparently been amputated for the same disease. It was probably a case of tuberculosis verrucosa cutis, a similar condition being described as lupus verrucosus.—Mr. CLUTTON related the case of a child in whom there was an extensive affection of the nose, pharynx, palate, and larynx associated with what appeared to be lupus vulgaris of the nose. Microscopic examination revealed a typical tubercular structure.—Mr. GOLDING BIRD remarked that he had found a diffuse ganglion on the back of the wrist to be typically tubercular in structure.—Mr. F. S. EVE, in reply, said that the disease did not reach deeper than the papillary layer of the cutis. He had heard of a case in which lupus seemed to have infected two children, causing tuberculosis.

Mr. D'ARCY POWER showed a specimen of Sarcoma of the Urinary Bladder. The cavity of the organ was obliterated, except at its upper part, by the new growth, which infiltrated the anterior and lateral walls as well as the fundus. The portion of the growth which occupied the cavity of the bladder was a tuberous and cauliflower-like mass. The rectum had become involved by the extension, and near the anus the tumour actually projected into the cavity of the bowel. The projecting portion had broken down, and a fistulous passage was established between the bladder and the rectum. The specimen was taken from a man aged sixty-four, who had had hæmaturia for eighteen months; the growth was partially removed by median cystotomy and dilatation of the prostate, but as it continued to increase in size, and micturition became difficult and painful, the bladder was punctured above the pubes. It was a typical mixed-celled sarcoma. Mr. Power drew attention to the alleged rarity of this form of vesical tumour, but stated that the museum of St. Bartholomew's was rich in examples of it; one was an alveolar sarcoma. In the Hunterian Museum there are two preparations of vesical sarcoma, and one in Guy's Hospital, also one in Middlesex Hospital.—Mr. HURRY FENWICK referred to the comparative frequency of sarcomata of the bladder, especially in young children under five, and after the age of fifty. Fifty specimens had been placed on record, and he gave statistics of them. The myxomata were possibly in many instances true sarcomata. In children the growths were multiple, and affected the trigone and inferior zone of the bladder; in adults they were single, and affected the posterior wall. In children the growths were more often polypoid; in adults sessile, except 10 per cent. possessing pedicles.—Mr. GOLDING BIRD showed a specimen the size of a hen's egg removed from the bladder of a women aged fifty-five, and believed to be a round-celled sarcoma.

Dr. COLLIER, of Oxford, showed a Suprarenal Capsule removed from a woman aged thirty-six, who had most of the symptoms of Addison's disease, but without any bronzing; there was also great excess of subcutaneous and subperitoneal fat, with caseous lymphatic glands. A caseous and fibrous deposit in the suprarenals caused adhesion on the right side to the liver. The left suprarenal was represented by a sac containing cheesy matter and adherent to the pancreas. The symptoms were erroneously referred to gastric ulcer. Eleven of Greenhow's cases showed no pigmentation.

The following card specimens were exhibited:—

Dr. TARGETT for Dr. Foy: (1) Cystadenoma of Thyroid; (2) Popliteal Aneurysm; (3) Isolated Fracture of the Base of the Skull.

Dr. MONTAGUE MURRAY: Cystic Disease of Kidneys.

Dr. PENROSE: Vegetations on Mitral and Aortic Valves; gap in first part of the aorta, with vegetations.

Mr. FENWICK: Tumour of Urinary Bladder.

Dr. F. T. PEARSE: Advanced Surgical Kidneys.

Dr. ANGEL MONEY: Multiple Sarcoma of Dura Mater and Calvaria secondary to suprarenal sarcoma.

MEDICAL SOCIETY OF LONDON.

"Hammer-toe."—Extirpation of Goitre.

AN ordinary meeting of this Society was held on Monday, March 19th, Mr. Knowsley Thornton, F.R.C.S., Vice-President, in the chair.

Mr. WILLIAM ADAMS read a paper on the Successful treatment of "Hammer-toe" by the Subcutaneous Division

of the Lateral Ligaments. After some observations on the pathology of "hammer-toe," in the course of which the author observed that this contraction with deformity, which usually affected the second toe, was essentially an hereditary affection, often traceable through two or three generations, he said it was never caused by short or narrow boots, although they might aggravate the affection. In a slight degree, the tendency to "hammer-toe" was often traceable at five years of age, and the contraction steadily increased, but seldom became confirmed until the age of fifteen. He then alluded to the observations brought before the Pathological Society (Dec. 21st, 1886) by Mr. Shattock, who had dissected two "hammer-toes" recently amputated, and had found that the deformity essentially depended upon a contracted condition of the lateral ligaments, and not upon contraction of the flexor tendons. In reference to treatment, the author described an operation which he had successfully practised for many years, essentially consisting in the subcutaneous division of the lateral ligaments. After having observed the failure of tenotomy to cure this contraction, he had adopted the method of dividing the lateral ligaments, and the correctness of this conclusion was now confirmed by Mr. Shattock's dissection. Immediate extension was adopted after the operation, and the toe retained in position by a metal splint for three or four weeks. Mr. W. Anderson had made a valuable contribution to the treatment of this affection, and had suggested a new operation of excising the head of the first phalanx, which he successfully performed. This operation, which is described in the Clin. Soc. Trans., vol. xx., p. 248, would be applicable to cases which could not be treated by the subcutaneous operation, and would supersede the necessity of amputation, which had generally been adopted in severe cases. —Mr. KNOWSLEY THORNTON thought this operation preferable to Mr. Anderson's serious procedure, and to the still more formidable measure of amputation.—Mr. W. ANDERSON said that Mr. Adams's operation involved prolonged after-treatment, and in less skilled hands might prove difficult, whereas his own method was easy, and was free from liability to relapse. The condition resembled *hallux flexus* described by Mr. Davies-Colley, which occurred during the period of active growth and in an articulation corresponding to that involved in "hammer-toe." *Hallux flexus*, however, had been found only in the male, whereas "hammer-toe" was equally common in both sexes.—Mr. SHATTOCK considered the ligamentous shortening a secondary phenomenon. It resembled claw-hand in the upper limb, and this comparison suggested a careful examination into the electrical condition of the interossei.—Mr. NOBLE SMITH had been in the habit of doing this operation for some time, though less precisely and scientifically. He compared the lesion to congenital contraction of the little finger.—Mr. WALSHAM showed a recent dissection of a "hammer-toe" which demonstrated that the contraction existed in the fibres of the glenoid ligament and in the fibres of the lateral ligaments which approached the glenoid; in another toe he reduced the deformity by dividing the glenoid ligament only. The plantar fascia and flexor tendons had nothing to do with the deformity, and electrical examination gave a negative result. He regarded the displacement of the toe as secondary to lateral pressure, and in after-treatment used no splints, but kept the toe straight with a little plaster-of-Paris.—Mr. BERNARD PITTS explained the causation of the deformity by mechanical pressure.—Mr. W. PYE alluded to the strong hereditary tendency, and thought the painful callus usually present might, by causing reflex spastic contraction, tend to increase the distortion.—Mr. ADAMS, in reply, felt sure that mechanical pressure did not altogether explain these cases; he did not think that division of the lateral ligaments necessarily involved opening the joint.

A paper was read by Dr. BOREL of Neufchâtel on the Extirpation of Goitre. He referred to the distribution of hypertrophy and cystic degeneration of the thyroid gland in mountainous countries, especially in those with geological limestone formations. In regard to the connexion of the disease with the consumption of lime as food, he alluded to the fact that great hypertrophy of the thyroid was common in dogs when six, seven, or eight years of age, and due in them probably to the large amount of lime they took as food in the form of cooked bones. In felines, which lived on raw meat, no such enlargement of the organ was noticed. In certain provinces of Switzerland goitre was endemic, but it had been made by drainage to disappear from one of the valleys of Upper Bavaria. He said that experiments on animals had proved beyond doubt that the thyroid acted as a regulator of the cerebral circulation, and its effect on the brain was exemplified clinically in Basedow's disease. In animals simultaneous extirpation of the spleen and thyroid produced death, but either could be separately removed with impunity. After extirpation of the thyroid, Kocher of Berlin demonstrated cerebral alterations in some of his patients. In two cases of his own cretinism followed removal in very young people, and Reverdin had observed a similar sequence. In patients past the age of puberty, the danger to the brain after extirpation of goitre was lessened. He deprecated interstitial injection of tincture of iodine as a mode of treatment; compression, shampooing, and the administration of iodide of potassium with Wildegg water had likewise little to recommend them. Puncture of cystic cases might do good, but was inefficacious in true hypertrophy, for which extirpation was the only possible remedy. He objected to operation in old age on account of the difficulty of arresting hæmorrhage from the degenerated arteries. With regard to the method of operation the patient should be placed in the semi-recumbent position, and an incision, either vertical, V-shaped, or H-shaped, made, according to the character of the tumour; the vessels should be included between two ligatures before division, and the nerves carefully isolated. In the cases of *goitres plongeants* (retro-sternal struma) it might be necessary to dissect as far as the aortic arch till one felt with the finger the pulsations of the auricle. Enucleation should be done with the finger or handle of the scalpel, and the wound should be treated antiseptically. The operation might be one of urgency, as in impending suffocation from pressure, or of expediency to remove an unsightly deformity. Cerebral disturbances and dysphagia, both transitory, had been noticed after the operation in adults, but he had never seen consecutive myxœdema. He gave the histories of three cases to illustrate the kind of mental disturbance that followed the operation; in one there was suicidal monomania, in one illusion, and in one melancholia. The dangers of the procedure were the entry of air into the veins, primary arterial hæmorrhage, and suffocation from compression of the softened trachea. He was able to cite twenty-two extirpations of goitre which he had done since the introduction of Listerism, in 1877, and two before that date.—Mr. KNOWSLEY THORNTON said that two issues were raised by the paper—the best time for the performance of the operation, and the after-effect on the health of the patient. Kocher had stated that cretinism and myxœdema were apt to follow removal of the gland; but Billroth denied this, and Dr. Borel's observations confirmed Billroth's statement.—Mr. LENNOX BROWNE said that Heron Watson of Edinburgh in 1868 was the first to remove the thyroid. He himself advocated removal of the isthmus if enlarged, and its simple division if not enlarged; he had adopted it in six cases, with improvement in all. He did not feel justified to recommend excision for cosmetic reasons. There was danger from hæmorrhage even in young people, as the arterial walls were often softened.—Dr. KEBER inquired if Dr. Borel had enucleated tumours of the thyroid.—Mr. B. PITTS related two cases in which he operated on account of impending death from asphyxia. In one he diminished pressure by evacuating cysts; in the other he performed tracheotomy. He thought the best treatment now was to remove the central portion only. He had successfully enucleated both tumours and cysts of the thyroid.—Mr. BOREL, in reply, said that the diagnosis of these tumours usually was not difficult; they were either cysts, hypertrophy without cyst, sarcoma, or carcinoma. As complications, he had met with pleurisy and laryngitis. He did not think it safe to puncture, and he thought the smaller size of English goitres was, perhaps, attributable to the small quantity of lime in the soil.

OBSTETRICAL SOCIETY OF LONDON.

Scarlatina during Pregnancy and in the Puerperal State.

A MEETING of the Society was held on March 7th, John Williams, M.D., President, in the chair.

Dr. AUST LAWRENCE showed a specimen of Extra-uterine Fœtation, with the Primary Gestation Sac.

Dr. HERMAN exhibited a Fœtus and Placenta from a successful case of operation at the fourth month, two hours and a half after Rupture of a Tubal Sac.

Dr. PENROSE brought forward a specimen of Left Tubo-

abdominal Pregnancy in which the Corpus Luteum Verum was in the Right Ovary.

The two remaining sections (sixth and seventh) of Dr. Boxall's paper, on Scarlatina during Pregnancy and in the Puerperal State, partly read at the January meeting, were now brought forward. The Clinical Relation of Scarlatina to Puerperal Septicæmia was the subject of the sixth section, in which a brief summary of the sixteen cases of undoubted scarlatina was given, and in one case only were the scarlatinal manifestations associated with signs of septic poisoning. Forty lying-in patients are known to have been exposed to one or more of the above cases of scarlatina. This series was presented in a tabular form, giving the time and duration of exposure and the course of the puerperium. On this evidence it was apparent that such exposure resulted in no detriment to the puerperium. As it might be urged that the 300 patients or more admitted during the prevalence of scarlatina were to a greater or less extent exposed, a chart (together with the percentage tables from which it was constructed) was also appended. This indicated the morbility (as judged by the temperature) prevailing not only during the whole scarlatinal period, but also during the three months which preceded the outbreak. The prevalence of scarlatina in the hospital was thus shown to have exerted no appreciable effect on other lying-in cases during the same period. The special value of local antiseptic measures in scarlatina during the lying-in period having been discussed, the following conclusions were offered:—1. That infection by the poison of scarlatina generally produces in the puerpera a disease which presents for the most part the usual symptoms of scarlatina, and runs the ordinary course of the disease without the appearance of septic manifestations. 2. That the disease, in addition to the usual symptoms of scarlatina (to a certain extent modified), may occasionally present signs of septic poisoning; that, when present at the outset of the disease, pelvic inflammation and septicæmia may usually be regarded as accidental complications, but, at a later stage, such signs may be the expression of septic process, analogous to the secondary throat of ordinary scarlatina. 3. That in rare instances the disease may assume a masked form, in which the ordinary signs of scarlatina are absent, or so slight and evanescent as to escape observation; and that, in some such cases, the only manifestation of the illness may be found in signs usually referred to septic poisoning.

The final section of Dr. Boxall's paper related to the Treatment of Scarlet Fever during Pregnancy and in the Puerperal State. After referring in very brief terms to remedial measures, the author discussed the means which should be adopted to prevent the spread of scarlatina to pregnant and parturient women. He pointed out the advisability, on the one hand, of isolating all scarlatinal cases and disinfecting all contaminated articles, and, on the other, of shielding pregnant and parturient women from the many risks of scarlatinal infection which surround them, and, when possible, of removing such patients from any district in which the disease is prevalent. The influence of a third person as a vehicle of infection was discussed, with special reference to the conditions under which it is likely to be exercised; and the measures which may be adopted to counteract that influence were pointed out. Finally, as the poison may be carried not only directly by the hands, but also indirectly by the clothes and general surface of the body, and possibly also by the breath, and subsequently given off into the atmosphere (from which it is inhaled by the patient), it was concluded that thorough washing and disinfection of the hands is not sufficient to ensure protection, but that a disinfectant bath, a complete change of clothing, and active out-door exercise, should be also included in the necessary precautions, and that these measures should be adopted not only by the doctor, but also by all other persons who had been brought into contact with scarlatinal poison, and especially by the nurse prior to attending on a lying-in woman or even visiting a patient advanced in pregnancy.

Dr. DOLAN (Halifax) said that in private practice it would be impossible to carry out all the precautions laid down in Dr. Boxall's valuable paper. From personal experience he found that, contrary to the generally received opinion, the puerperal woman did not appear to contract scarlatina, even though exposed to the danger. The puerperal death-rate did not rise in Halifax during scarlatinal epidemics. Two separate classes of practitioners, the first to attend labours only, and the second to attend cases of scarlatina, could not possibly be established, nor would such a system be necessary.—Dr. PLAYFAIR reviewed some older opinions on Dr. Boxall's subject. Scarlatina had been held peculiarly dangerous, under certain circumstances, to lying-in women. On the other hand, it might run a perfectly normal course. Lastly, the fever was supposed to run a very untypical course in some puerperal cases, appearing practically identical with puerperal fever or septicæmia. Dr. Boxall's valuable observations did not disprove these opinions. His patients, it should first be remembered, were placed in the most favourable conditions, where the grave effects of scarlatina could hardly be looked for. Nevertheless, he admitted that he had observed a very mild form of scarlatina, and also a masked form resembling cases of septic poisoning. Dr. Boxall had noted the increased susceptibility of puerperal women to scarlatinal infection, the modification of certain symptoms, and the existence of some unknown modifying influence under the circumstance. If so, this influence would be yet more powerful and less impeded in cases unprotected by the precautions enforced at the General Lying-in Hospital. Dr. Playfair suggested a theory which would explain the signification of mild typical scarlatina occurring in some puerperal cases, and of a masked and septic form in other cases. In the one case the disease was contracted through the ordinary chances of infection; in the other, it was conveyed directly to the genital tract by the hands of the obstetrician or midwife, or by infected sponges &c. Twenty-five years ago a lying-in ward was established in King's College Hospital. The arrangement was disastrous, and was at length abandoned. During the existence of the ward there were outbreaks of erysipelas in the surgical quarter of the hospital, and coincident epidemics of puerperal fever in that ward, but the lying-in patients had no symptoms of erysipelas, which, on the other hand, were seen in some of their infants. Here was an analogy with the conduct of the scarlatinal poison.—Dr. AUST LAWRENCE (Clifton) believed that some of these cases did not die of the fever itself, but from decomposition of the lochia induced by the poison. In one case the patient was saved by timely washing out of the uterus.—Dr. HERMAN criticised the opening portion of the sixth section of Dr. Boxall's paper, which included theories already accepted by others; but, though still based more or less on conjectures, Dr. Boxall's conclusions were the result of a sound method of investigation, for he began with the parent factors—the scarlet fever and the puerperal woman. He had not, like others, started with the case, hunting back for the cause. Still Dr. Herman was of opinion, comparing the above conclusions with the valuable morbility tables before, during, and after the prevalence of scarlatina in Dr. Boxall's hospital, that the poison of scarlatina, when communicated to the lying-in woman, produced that disease and nothing else.—Dr. LEITH NAPIER dwelt at length on recent observations with regard to rashes which were not really scarlatinal, and gave his own experience on rubeola in the puerperium. These rashes must be remembered in relation to any case or series of cases of alleged mild and not fatal scarlatina in the puerperium.—Dr. BRAXTON HICKS considered that the paper could only be taken to prove that fifteen cases of scarlatina in puerperal women could, with proper care, pass through the complaint without exhibiting more than the ordinary symptoms; but that the author in his remarks on the connexion between scarlatina and so-called puerperal fever did not draw his conclusions from the cases in his paper, as they were all mild cases, but must have drawn them from other cases he had either seen or read of. The cases quoted did not explain those where nearly simultaneously the children were taken with scarlatina and the lying-in women with so-called puerperal fever; nor those where a woman had been for two months previously exposed to scarlatina without being attacked, and then within a short time after delivery was taken with either scarlatina or puerperal fever. In reference to the allusions to his own paper, he begged to remind the speakers that the paper he had brought forward many years ago was only entitled "A Contribution to our Knowledge of Puerperal Diseases." The cases were seen in consultation, and did not profess to describe ordinary practice; but anyone could draw his own conclusions from them. He thought if all the Fellows of the Society brought their cases in similar manner we might be able some day to unravel the subject, but we must call in the aid of those who studied infectious diseases, and particularly those who investigated microbes.—Dr. MATTHEWS DUNCAN noted how antiseptic treatment

kept away the microbes of suppuration and septicæmia, but did not ward off scarlatina. He believed in the theory that the so-called scarlatina of midwifery and surgery included more than one disease; but he regarded true scarlatina occurring within a few days of lying-in as a disease of enormous mortality. He had observed a red rash with fever, which began around the wound made in opening a chronic inguinal parametric sinus. The rash spread, but there was no certainty that it represented scarlatina. Dr. Duncan did not believe in the commingling of scarlatina and puerperal fever. When the former disease raged in London, killing 250 a week, there was no increase of puerperal fever. This fact agreed with Dr. Dolan's practical conclusions.

It was resolved by Dr. GALABIN, seconded by Dr. HORNOCKS, that the debate on Dr. Boxall's paper be adjourned. The resolution was carried unanimously.

ROYAL ACADEMY OF MEDICINE IN IRELAND.

Dysentery.—Cerebro-Spinal Disease.—Suicidal Wound of the Heart with a Pin.—Multiple Abscesses of Liver and Lungs.

A MEETING of the Pathological Section of the Academy was held on Jan. 13th.

Dr. CONOLLY NORMAN, by the desire of the Section, made a communication as to the cause of the outbreak of Dysentery with which he had to deal. Having briefly glanced at the history of other epidemics of that disease, and discussed the question of diet and the influence of insanity as a factor, Dr. Norman stated his belief that the dysentery which existed in the asylum under his charge was due to defective drainage, and laid down the following as probable general laws that regulate the appearance of dysentery:—1. Dysentery is communicated through exhalations from a soil saturated with the products of organic decomposition. 2. The incidence of dysentery at particular times and seasons is due to the increased moisture of the soil at such times. 3. When dysentery breaks out there is commonly a concurrent outbreak of severe diarrhœa. 4. Dysentery appears where dysentery has been before. 5. When dysentery appears over a large area, including its own haunt, it appears in the latter situation in its worst form and to the greatest extent. 6. Like other malarial affections, dysentery attacks by preference those who are not acclimatised to the conditions that have produced it.—Dr. FRAZER believed that dysentery was and could be contagious, for he remembered making a post-mortem in the Richmond Hospital from which he got a most severe attack of dysentery which nearly cost him his life, and which he believed to have been produced by contagion. He was not satisfied with Dr. Conolly Norman's observations upon malaria. From the most remote times dysentery had been epidemic in Ireland. In the battles during the reign of Queen Elizabeth the soldiers were decimated by it; the same thing occurred during the wars of Cromwell and William the Third; and yet Ireland had always been remarkably free from malaria. They had never had ague in that country. But that dysentery might be associated with malaria, on the other hand, was possible. Malaria, as such, was confined to very limited districts in Ireland. He knew that it existed along the Dublin river, and could put his finger upon the spots where it occurred; but there had been no coexistence of dysentery in those spots. Another remarkable fact was that it occurred at certain seasons of the year. It was well known to break out in autumn, especially after the first frosts, which was accounted for in former times by persons drinking water containing animal and vegetable material in a state of decay. As for its mortality, he was resident in the hospital during the years 1847, 1848, and 1849, and had to attend specially upon fever and dysentery; and the mortality in cases of dysentery—of which only the very bad were admitted—was three times as great as in the worst fever cases. It amounted at one period to one out of every four cases.—Dr. NORMAN, in reply, said he had, in order to economise time, omitted to read from his paper the following sentence: "There is reason to disbelieve that dysentery, like other diseases of its class, assumes or simulates now and then a contagious form." As to the absence of malaria in Ireland, he was not sufficiently learned in the history of Irish epidemics to be able to say much about it; but there was strong reason to believe that the "country fever" described by seventeenth-century writers, to whose accounts Dr. Frazer had referred, was a malarial fever. It carried off a number of well-known men, including General Ireton; and whilst it raged amongst the troops at war on both sides during those days, dysentery was also very prevalent. As to the disease arising from the water used, that question could not arise in reference to the epidemic in the Richmond Asylum, for that institution was supplied from the Vartry. The mode of water storage there was not quite perfect; but he had frequently had the water analysed, and had never received any report detrimental to its character. As regarded mortality, his results had been more favourable than he had hoped for, having regard to other epidemics in this country and in England. Out of 147 persons who up to the end of last year were attacked with dysentery during the fifteen months that he had charge of the Richmond Asylum, there were only twenty-three deaths. The proportion of deaths at Carlisle under Dr. Clouston was one in three; and according to the statistics of Norman the proportion at the Colney-hatch and Bodmin Asylums was also one in three.

Dr. BERNARD of Londonderry read a paper upon an obscure case of Cerebro-spinal Disease, and exhibited microscopical sections of portions of the spinal cord and central nervous system. The case in some points resembled one of irregular sclerosis.—Professor PURSER said three specimens taken from the subject of the case had been submitted to him by Dr. Bernard. The first was a section of the upper part of the medulla oblongata, and he had been unable to satisfy himself that there was any sclerosis in it. There was a spot in the centre which appeared unstained; but that might have been owing to a defect in the staining. Another spot looked somewhat as if the nerve tissue had gone, and had been replaced by connective tissue. Another specimen was from the middle part of the cervical spinal cord, and the anterior cornu on one side of this had disappeared. He could not satisfy himself that there was any increase of connective tissue; it looked more like atrophy. The third specimen was a section of the optic nerve, and in this there was an accumulation in some places of round cells, which seemed to indicate neuritis to be the pathological expression of the optic neuritis which Dr. Bernard saw. He (Professor Purser) thought the case admitted of a good deal of discussion.—Dr. FINNY said it struck him as remarkable that many appearances that one was accustomed to see in sclerosis were absent in this patient. A remarkable feature was the very rapid progress of the case. Cases of insular sclerosis were usually very slow, running over several years. It was also remarkable that the patient was so young—under twenty years of age. Another point was the early loss of control over the bladder and rectum, which preceded the nystagmus and perversions of the eye. The case was full of clinical puzzles, and if a post-mortem had not cleared it up, one would have supposed that it was a case of mere acute myelitis. He (Dr. Finny) did not catch in what part of the brain the patches were found in the greatest number; nor whether the microscopic examination showed the ordinary hard sand-coloured appearances that they often saw in cases of the disease in question. He took the case to be one of cerebro-spinal sclerosis, in which the hardening existed in both parts.—Dr. BERNARD, in reply, said he looked entirely to Professor Purser for the exact nature of the disease. There was evidently atrophy of the left cornua of the lower cervical vertebræ.

Mr. WILLIAM THOMSON communicated a case of Suicidal Wound of the Heart with a Pin. The deceased was admitted to the Richmond Hospital, but was found to be dead. He had been arrested as a lunatic running about the street in his shirt. On examination of the body, the head of a pin was discovered in the fifth intercostal space, two inches and a half from the nipple downwards and inwards. The pin had traversed the pericardium, and wounded the anterior wall of the left ventricle. The pericardium contained seventeen ounces and a half of bloody fluid, and there was a small rent in the wall a quarter of an inch in diameter, which was filled by blood clot. The surface of the ventricle in contact with the pin was torn to the extent of nearly an inch; a small vein was also wounded; all the internal organs were congested; the urine was albuminous. Mr. Thomson referred to several cases of similar character.

Dr. FINNY exhibited specimens illustrating Pyæmic Multiple Abscesses of the Liver and Lungs, which had run a rapid course of about ten days, and in which jaundice and the expectoration of pus had occurred but five days before death. The patient, who had been admitted under

Dr. Finny's care into Sir Patrick Dun's Hospital on Nov. 16th, 1887, gave a history of having been treated for pain and suffering referred to the left side of the abdomen, over four years previously, and of the question being discussed as to the existence at that time of cancer of the stomach. Since then he has had frequent attacks of constipation and fæcal accumulation. While in hospital he had one of these attacks of pain and constipation, and for about a week there was no motion without the aid of large enemata and strong aperients—the alvine discharges pointing to their having lodged in the bowel for a considerable time. For the next ten days the febrile symptoms of enteritis were present, and in the region of the left hypochondrium there was much tenderness on handling, and dulness in percussion. As the splenic dulness seemed to be continuous with it, it was considered to be due to an enlarged and tender spleen. On Dec. 15th slight jaundice was noticed in the urine and skin, which afterwards was moderately pronounced; and at the same time the patient expectorated some sanguineo-purulent matter, which became each day more distinctly purulent; the quantity of sputum was never very much. Beyond isolated spots of mucous râles throughout both lungs, no other evidences of lung disease were present. From Dec. 15th to 21st, when death occurred, the symptoms were—delirium, rapidity of the pulse, a high range of temperature, perspirations during sleep, and failing strength and appetite. At no time was there found in the urine either albumen or indigo. The post-mortem appearances were as follows:—In the situation to which pain had been referred there was found an abscess, shut in by firm and old adhesions of the peritoneum, and limited by the left kidney, the lower third of the spleen, the tail of the pancreas, and the superior surface of the splenic flexure of the colon. The abscess contained a couple of ounces of grumous, cheesy matter. Its wall was intimately adherent to and incorporated with the kidney; the abscess had not invaded or opened into the gland, but into the spleen at its lower part a small track could be traced, and a communication was made out, with an abscess in its substance of the size of a small bean. The liver was much enlarged, and was dotted over, particularly in its under surface, with numerous yellow spots, some alone and some in clusters of six or seven. Many were elevated, varying in size from that of the head of a large pin to a split pea. Similar spots were found all through the substance of the organ. On section they were yellow and purulent, without any marked hyperæmia in the tissue around. A similar abscess was found in the left hepatic duct. A moderate amount of recent perihepatitis was visible in the fissure of the liver, and while the cystic duct was narrowed, there was no obstruction to the hepatic ducts. The stomach was healthy, while the gastro-hepatic omentum exhibited old adhesions and thickenings round the duodenum. The lungs were emphysematous, and on section were studded, and especially the right one, with circumscribed small abscesses, containing pus of exactly the characters of the sputa. The glands, retro-peritoneal and mediastinal, were somewhat enlarged and reddened, but contained no pus. The brain was free from all disease. The points of interest were: (1) the long duration—over four years—which had elapsed between the primary inflammation of the peritoneum and its subsequent conversion into an abscess, and, as a corollary to this, the danger—remote as well as immediate—attendant on peritoneal inflammations; (2) the mode by which the secondary abscesses of the liver and lungs were developed—viz., by the pus directly entering the portal circulation through the communication with the spleen, and thence again by the hepatic veins being carried into the lungs; (3) the short time which elapsed between the direct infection of the blood and the occurrence of lung abscesses—a period which may be set down as under five days; and (4) the formation of the multiple abscesses was embolic in its nature, and accounted for the number and small size of the hepatic abscesses.—Dr. WALTER SMITH said that the case confirmed what had been laid down—namely, that the jaundice and fever, and the severe nervous symptoms that had been observed in it, were sufficient to enable them—excluding the rare instance of acute phosphoric poisoning—to diagnose pyæmic abscesses of the liver.

PUBLIC BATHS, GUILDFORD.—The Urban Sanitary Authority has formally adopted plans for public baths, at an estimated cost of £2800.

Reviews and Notices of Books.

Medical Lectures and Essays. By GEORGE JOHNSON, M.D., F.R.C.P., F.R.S. Pp. 900. London: J. & A. Churchill. 1887.

[FIRST NOTICE.]

IT speaks well for the indomitable energy of Dr. George Johnson that he should, immediately after being freed from onerous duties at King's College Hospital, have undertaken the collection and publication of these lectures and essays, and that he should have submitted them to such rigorous pruning and amendment as to make them forcibly represent his latest ideas upon all those subjects more particularly his own. So much study has of late years been devoted to the elucidation of the causal relationship of germs that we are in danger of overlooking the lively discussion which, within a comparatively recent time, attended the enunciation of the author's theory of cholera and his physiological explanation of the chain of its symptoms. This republication represents the attitude of mind with which an author looks back with pride and satisfaction to former contests, with matured views criticising the opinions of scientific opponents, and retouching his work with the light of modern investigations, until the picture presented is hardly recognisable as the work of former years. Dr. Johnson tells us that this collection is for the most part a reprint of papers which have been published in various forms and at different times during the last thirty years or more, and he expresses a hope that he may yet convince every "unprejudiced reader that the key to the solution of some of the most important pathological problems is to be found in a correct appreciation of the power possessed by the muscular-walled arterioles to regulate and, under certain conditions, to entirely arrest the circulation of the blood." This idea really forms the keynote of the book, for although it includes a consideration of a very wide range of medical subjects which have engaged the study of the author, the theory of arterial spasm is frequently to be met when least expected, and it is always made to throw valuable light upon the question more immediately under consideration.

The volume commences with an introductory address on Medical Work and Medical Duty, delivered at the opening of the winter session at King's College, in 1886. In this address the author aims at supplying, from the stores of knowledge and experience of one "who has reached the autumn of life," some materials which may be of service to those who are yet in the springtime of existence. Full of sage advice, this lecture need not detain us beyond noting that the following extract from Oliver Wendell Holmes is quoted approvingly: "Every real thought on every real subject knocks the wind out of somebody or other. As soon as his breath comes back he very probably begins to expend it in hard words. These are the best evidence a man can have that he has said something it was time to say." This is certainly a consolatory doctrine for one whose views on so many subjects have in turn excited adverse criticism. The true commencement of the book is, however, formed by the first of Dr. Johnson's Lumleian Lectures on the Muscular Arterioles, their Structure and Function in Health, and in certain Morbid States. In this lecture, which was delivered some ten years ago, is to be found an able *résumé* of the history of the gradual growth of knowledge of the vaso-motor system, and also of the appreciation of the relative work performed by the larger and smaller vessels. The author's views on this question are summarised (p. 20) thus: "While the resiliency of the large arteries, which are mainly elastic but partly muscular, aids the heart in propelling the blood onwards towards the capillaries, the contraction of the arterioles, whose middle coat is entirely muscular, antagonises the heart and the larger arteries, and their stop-

cock action, under the guidance of the nervous system, regulates the blood supply to the various tissues and organs in accordance with their physiological requirements." Turning then to the pathological states, Dr. Johnson quotes Dr. John Reid's observations upon the blood pressure during asphyxia, published in 1841, and compares them with experiments performed by himself and Dr. Rutherford in 1875; and his conclusion, drawn from a very logical consideration of the conditions of these experiments, is (p. 31) that "the active contraction of the systemic arterioles throughout the body is more than equal to the contractile power of the left ventricle, and the force of contraction in the pulmonary arterioles is more than equivalent to that of the right ventricle." These two definite statements have so frequently been assailed that we are glad to trace the author's line of reasoning once more; and, as they practically form the physiological basis or starting-point for many theories subsequently propounded, we think Dr. Johnson has acted wisely in placing this lucid explanation of his views at the very beginning of the volume instead of arranging his lectures in chronological sequence. A chapter upon physical phenomena connected with the circulation, respiration, secretion, and absorption, touches upon many facts concerning the hydrostatics of the vascular system, and the explanation of the action of venesection, hydragogues, purgatives, and diarrhœa. The same line of thought is pursued in the two succeeding chapters upon the results of retrograde engorgement of the blood-vessels, and the action of bleeding, hot fomentations, or cold applications.

The lengthy chapter which follows is divided into sections, and will probably be read with the greatest interest, since in some hundred and twenty pages it comprises the author's present opinions upon the pathology and treatment of epidemic cholera. When compared with his previous publications upon this subject, we note that, while time has served to soften an occasional asperity of diction employed in the heat of discussion, it has, on the other hand, deepened his conviction of the truth of his views as originally expressed. Viewed from a distance, obtrusive trivialities and details are lost, while the main facts shine out more clearly. After quoting Sir Thomas Watson's criticisms upon his theory of cholera, published twenty years ago, Dr. Johnson appeals for a careful and impartial consideration of his facts and reasonings as now expressed, since they embody much additional evidence in support of his doctrine, together with a reply to such published criticisms and objections as appeared to him to be worthy of notice. He commences with an inquiry into the relation between the symptoms of choleraic collapse and the loss of fluid by vomiting and purging, and, after an exhaustive examination of the statements and observations of various authorities, he concludes that the weight of evidence is distinctly opposed to any such relationship. Similarly he deals with the question of whether the symptoms of collapse are such as an excessive drain of fluid from the blood would be likely to produce, and he urges that the rapidity with which a patient recovers from choleraic collapse is wholly unlike the chain of events resulting from exhaustion caused by excessive drain of liquid. Then he considers the evidence for and against the older theory of collapse as afforded by the effects of various and opposite modes of treatment, such as alcohol, venesection, purgatives, or the injection of hot saline solutions into the veins, admitting the "superficial appearance of truth" in this theory, but quoting its advocates against each other with telling force. Of the mode of communication of cholera the author necessarily speaks with more hesitation, being compelled to refer rather vaguely to "some widely diffused atmospheric influence which exists during an epidemic season, and which then concurs with the local conditions in favouring the spread of disease." With a quiet dignity of language, Dr. Johnson refers to the "unusual opportunities" of Mr. C. Macnamara for ascertaining the effect of cholera dejecta in various stages of decomposition. Having thus to a large extent cleared the ground, he then passes on to show that the poison, the infecting material of cholera, enters the circulation before it gives rise to the characteristic gastro-intestinal symptoms, vigorously opposing the views of Sir John Simon as to cholera beginning as "a bowel disease without even a passive intervention of the blood." Former theories of choleraic relapse having thus been tried and found wanting, he proceeds to give in detail what he believes to be the true interpretation of the phenomena. His theory of impediment to the pulmonary circulation is so well known now that it needs no restatement here. We cannot, however, refrain from calling attention to the ready ingenuity with which he gathers support for his views from experiments undertaken with totally different intentions, and the aptitude with which he employs the results of even the most recent investigations into the *modus operandi* of various toxic agents. This section shows most clearly the wide interest he still takes in medical literature, and demonstrates the avidity with which he grasps any and every statement which can be brought to support his cherished views.

Dr. Johnson next deals very briefly with the physical changes in the blood, and with the chemical characters of the intestinal discharges, and then devotes fuller consideration to the treatment of cholera and choleraic diarrhœa; and in a series of short paragraphs, printed in italics, he gives illustrations of the practical application of his principles. He claims for his treatment that it "is not a mere system of drug-giving, but a definite plan based upon a careful study of the natural history of the disease." The solemnity of language and the air of conviction which pervade the whole chapter upon cholera are very impressive, and constantly remind us that the author's position claims for his views respectful consideration. This chapter alone should win for him an honoured place in the history of medicine, but we leave for future consideration the greater portion of the book, which, since it includes many lectures upon kidney disease, is quite as full of interest as the chapters already touched upon. We cannot, however, close this notice without again congratulating Dr. Johnson upon having undertaken this task of collecting and rewriting such valuable papers.

ARMY MEDICAL RESERVE.

To the Editors of THE LANCET.

SIRS,—I am directed to forward to you the following resolutions passed at a meeting of the Council of the Volunteer Medical Association, held on Friday, March 16th, 1888, at 26, King William-street, Strand, and to ask you to be good enough to insert them in your next issue:—

1. On the motion of the Treasurer, seconded by Surgeon-Major Baines, it was unanimously resolved, "That, having considered the terms of the Royal Warrant for creating an Army Medical Reserve, this Council recommends that no action be taken by the Association in reference thereto, thus leaving the question of joining the Medical Reserve entirely open for the individual members to act as they think best."

2. Proposed by the Treasurer, seconded by Surgeon-Major W. G. Shepherd, and unanimously carried, "That this Council, recognising the fact that in the recent Royal Warrant not any of the suggestions emanating from this Association for the better organisation of the Volunteer Medical Service have been conceded, and, further, noting that the promises of the Secretary of State for War relative thereto which were made in the House of Commons on Aug. 16th last have not received effect, a deputation be appointed to wait upon the War Secretary with the view of urging the adoption of the same."—Yours faithfully,

ALFRED LINGARD,
Acting Surg. 3rd Midl. Artil. Volunteers (Hon. Sec.).
26, King William-street, Strand, W.C., March 19th, 1888.

THE LANCET.

LONDON: SATURDAY, MARCH 24, 1888.

WHEN in 1518 King HENRY VIII. granted the Charter constituting the Royal College of Physicians, of which Dr. THOMAS LINACRE was the first President, the right to elect a President annually was bestowed upon the whole of the Fellows. But a few years later this power was withdrawn by statute, and for more than 300 years the Fellows were content to leave the selection in the hands of eight of their number, who were termed the "Elects." To this oligarchical system is no doubt owing the long continued isolation of the College from the general interests of the profession, nor can we be surprised at noticing the absence from the long list of occupants of the presidential chair of some whose fame has far outlived that of many who enjoyed the honour. It was not until 1860 that the statute in question was repealed by the Medical Act, and the Fellows once more enjoyed the privilege of which they had so long been deprived. Five Fellows have in turn been chosen since that date to hold the office of President—viz., Sir THOMAS WATSON (1862), Sir JAMES ALDERSON (1867), Sir G. BURROWS (1871), Sir J. RISDON BENNETT (1876), and Sir W. JENNER (1881),—the practice of re-election in several successive years, which had long been adopted, being still (and wisely) pursued. The time has now come when the Fellows will have to make a new choice. It is a period in the history of the College far more momentous than any of the stagnant times when the Elects possessed the power which is now vested in the whole body of Fellows. We have recently stated in some detail why we consider this to be the case, and have advanced reasons why from the position now assumed by the College the selection of a President is a matter of interest to the whole profession. So much, we believe, depends upon the result of this election that we do not hesitate once more to refer to it, in order that the issues at stake may be clearly appreciated.

It will be universally admitted that the roll of Fellows of this College contains a large number of men whose professional eminence and personal character may well entitle them to occupy the chair of LINACRE. The Fellows of the Royal College of Physicians of London as a body may fairly be said to represent all that is worthiest in medicine. There is no country which can show a like assembly, and doubtless much of its prestige is due to the traditions of the College and the high standards of professional honour that it has always held. It might, then, be deemed a matter of little importance to those outside the College as to who might be chosen to act as its President. But if the College is to continue to occupy its chief place in the profession of this country, it is desirable to have one at the head of its affairs who will direct and lead in the difficult times that are approaching. The College has emerged from its self-centred and isolated position, and can no more return to it than it can wholly detach itself from its past history. It has crossed the Rubicon; it has joined hands with its once contemned rival, and must continue to progress unless it wishes to be left behind and to lose the influence it has gained in medical education.

We have no doubt that there are some, even among those who might well be thought of as fitted for the President's office, who may think that in making such advances, in taking so active a share in the licensing of practitioners, the College has neither added to its dignity nor been faithful to its history. They would like to linger in the past, and might even wish to reconvert the College into the close corporation that it once was. Some fragments of the old shackles do still remain, but that they can ever be reproduced in their entirety is impossible. Nay, rather the time must come when, like other corporations, the Royal College of Physicians itself will have to be recast on a wider basis even than that on which it now stands. Therefore any who hold narrow, if exalted, views of the functions of the College, no matter how much they may be esteemed on other grounds, should not be selected to guide its fortunes. The same is true, with but slight reservation, of those who view with more or less indifference both the historical position of the College and its work in the present. It would be unfortunate if at this juncture the President should be one so philosophically minded as to care for none of the matters in ethics or education which give life and action to the College, which, indeed, mainly justify its existence as an institution. If, then, the College is to retain its present position, and if it is to engage in its work the interest of its whole body, as well as to be the pioneer in professional matters, the choice should fall upon one of those who have shown themselves most alive to these principles, and who will do most to advance them. The Fellows may be trusted to make this choice, uninfluenced by personal considerations or private feelings. Their duty is one of great responsibility, and they should realise to the full its importance. The profession at large will not fail to recognise in their selection how far they have acted up to the full measure of their responsibility, and have been determined in their choice not by reference to the good of the College alone, but of the profession of which the College is the head. There are, indeed, among those likely to be selected, Fellows who have been long associated with the work of medical education. They may not be the oldest, but they rank amongst those senior Fellows who have sat at the Censors' Board and filled other offices in the College. From the College point of view they are amply qualified; as they are from the standpoint of professional eminence, or that of personal character. But how do they stand with respect to the question which, of all others, will come to the front in the next few years? They may have given support to the scheme of conjunction with the College of Surgeons even at the cost of seeing for ever lost a wider conjoint scheme which they had favoured; they may have by vote and speech shown themselves zealous in promoting the scheme for the constitution of a Senate of Physicians and Surgeons with power to grant degrees; but what will be their attitude if the movement for a Teaching University should make such an advance as to come near to realisation? This, to our thinking, is a most important point—the recognition that a purely professional degree is far less desirable, especially if the power to grant it be in the hands

of corporations, than a degree that shall confer a certain academic status, as much, at least, as that which attaches to the Edinburgh University.

Of two well-known Fellows who are most likely to be thought of from this point of view, one has taken a very large share in the theoretical work of medical education both in the Medical Council and in the University of London; but surely he had misread the meaning of the cry that has come up from the London schools when he declared in the Convocation of that University that it has amply supplied the needs of London, and in the Senate approved of the action taken to oppose the creation of a Teaching University, whilst he moved the resolution whereby the Senate refrained from taking like steps against the scheme of the Royal Colleges. Again, the position he occupies in the University of London and in the General Medical Council should be regarded as an insuperable objection to his being elected President of the College, as such a result might lead to endless trouble and difficulty. The other Fellow to whom we refer has, on the other hand, been himself a leading hospital physician, and a teacher in one of our largest medical schools. He is in actual touch with the views of the teaching bodies of London and their students, and appreciates to the full the great injustice under which the latter suffer at the hands of the London University. His active mind and liberal views will be sure to lead him to see that the Colleges will gain rather than lose if they form a part—the leading medical part—of a great and real University of London; and we have little doubt that under his guidance the true position which the College of Physicians should take in this question would be attained. The services he has rendered in the cause of medical education deserve this recognition, and, although, as recently happened, his zeal for the promotion of what he held to be a good cause outran his discretion, this mistake will, we trust, not be allowed to stand in the way of his promotion to an office for which he has long been regarded as the fittest to succeed the present holder. It is true that he was misled, and made to appear to countenance a step in professional ethics of doubtful propriety; but he acted honourably in withdrawing as soon as he realised the position in which he had unwittingly placed himself. THE LANCET felt bound to vindicate the honour of the profession when matters took the turn they did; but none the less do we heartily desire to see the gentleman whose action we then criticised occupy the position that he has by a life of active endeavour amply earned. In this we believe that we represent the feeling of the profession. We have done what we conceive to be our duty. It now remains for the Fellows of the College of Physicians to do theirs.

THE varieties of hemianopsia offer a grand scope for the exercise of the pathological faculty. New facts have not been slow in forthcoming, and their interpretation, though still a matter of uncertainty, is gradually getting more satisfactory. SEGUIN has contributed some excellent articles to the *Journal of Nervous and Mental Disease* (vol. xiv.), which, though containing nothing absolutely new, discuss hemianopsia in a plain, straightforward way, so that the reader of them cannot fail to feel his grasp on the subject to be strengthened. The value of the symptom which WERNICKE designated by the phrase "hemiopic pupillary reaction" is differently estimated by neurologists. SEGUIN has related three cases tending strongly to show that this symptom may prove of actual diagnostic service. We agree with him in thinking that the sign had better be termed "hemiopic pupillary inaction." This symptom is very easy to understand if it be remembered that the normal optic apparatus contains a reflex arc which automatically regulates the size of the pupils under different degrees of illumination. The component parts of this apparatus comprise the sensitive retina, on which rays of light make their nervous impression; thence the nervous impulses are conducted along the optic nerve and tracts to the centre in the corpora quadrigemina, where the centripetal pulses are converted into the centrifugal, and these going outwards along the ciliary nerves of both sides cause the irides to contract. A luminous impulse from one retinal expansion produces the reflex motor act in both irides, and the entire iris contracts in all instances, because the termination of the ciliary nerves in the irides is plexiform with intercalated ganglion cells in the muscle. This reflex action may be destroyed by disease at various parts of the reflex arc. The entire retina, or one of its halves, or a more limited part of it, may be insensitive to light from local disease or nerve degeneration. Or the conducting centripetal paths may be interrupted by a lesion, and it is in these cases that the hemiopic pupillary inaction would prove of service in diagnosis. The centre for the reflex act, the grey matter, in which the mysterious transformation of a sensory into a motor pulse takes place, which, according to VON GUDDEN and others, is in the corpora quadrigemina, may itself be diseased. The efferent nerves, of course, may be damaged, or the iris may be prevented from acting as the result of local disease. The considerations are thus very much the same as in the discussion of any simple reflex mechanism. If, in the hemiopic eye, a pencil of light be thrown, concentrated from a lamp by an ophthalmoscopic mirror, directly into the eye in its optical axis, a full and rapid pupillary contraction is noted. If the same light be thrown obliquely at an angle of 40° with the plane of the cornea so as to chiefly strike the blind half of the retina, this reaction does not take place, or only slightly, which slight action, if it occur, may be ascribed to the diffusion of the light on to the sound half of the retina. In employing this test, the patient should be in the dark room, with the lamp behind his head, and he should be directed to look to the other side of the room so as to relax his accommodation. A faint light from a mirror may be thrown on to the eye for the purpose of ascertaining the size of the pupil. Next a beam of light, focussed from the lamp by an ophthalmoscopic mirror, may be used so as to ascertain the amount of contraction of the pupil from different angles of illumination. SEGUIN'S first case of hemiopic pupillary inaction was one of loss of vision in the left eye, with temporal hemianopsia of the right field of vision. There was complete atrophy of the left optic nerve and partial of the right, on the nasal side. There were no other symptoms of cerebral lesion, and it is fairly concluded that the lesion involved the left side of the optic chiasma, causing atrophy of the direct and crossed fibres of the left nerve and of the crossed fibres of the right nerve. In the second case there was partial blindness, with marked atrophy of both optic nerves. The temporal halves of both

fields of vision were obscured, and also the upper nasal quadrant of the left field. Again, without other symptoms of brain mischief, this peculiar form of hemianopsia would indicate the existence of a lesion so placed as to destroy both fasciculi cruciati and the basal or inferior half of the fasciculus lateralis of the left eye. In the third instance of hemiopic pupillary inaction, there was almost total loss of vision in the right eye, with temporal hemianopsia of the left eye. Partial atrophy of both optic nerves was noted, and again there was noticed an absence of cerebral symptoms. The optic nerve atrophy in all the cases was primary, and not post-neuritic.

No more difficult task has fallen to any statesman for many years than that which devolved upon Mr. RITCHIE on Monday night in the House of Commons, and certainly on no recent occasion has any measure dealing with complex interests been more favourably received. That so little objection has hitherto been taken to the Local Government Bill by persons of diverse political opinions is due not less to the admirable manner in which it was placed before Parliament than to the ingenuity shown in its construction.

It has often been said that local government is on its trial. This is hardly correct. Local government has long since been recognised as a permanent institution of the kingdom; one form or another has been found wanting, but the principle that communities should be permitted to manage their own affairs has for many years been finally accepted. The question which required solution was the details of the best constitution and the powers of the local governments, and these could not possibly be determined until further experience had been gained. The chief lesson which has been learnt is that, to ensure the successful working of any system of administration, it is necessary that those who take part in it should be actuated by other than self-interested motives. To induce men of independence and position to share in the control of purely local matters, it is obvious that their duties must not be unimportant. The failure of the past has been due to the fact that no sufficient incentive has existed for the abler men of the country to become members of local boards, and as a result the control of local business has drifted into less competent hands.

In the measure which Mr. RITCHIE has now brought forward there is no suggestion of the distrust which has hitherto characterised the treatment by Parliament of local authorities. The sole thought has been to make them worthy of the confidence of the nation, and to permit them to exercise their functions without interference and without restraint. Mr. RITCHIE'S Bill, moreover, is no feeble endeavour to amend evils that have long been recognised; it is in every sense thorough, and its very completeness is perhaps the quality which gives it the greatest prospect of success.

The idea of taking the English county as the area of administration by each Council will commend itself to many whose political instincts might lead them to regard with hesitation the proposal to confer upon an elected body the powers previously exercised by those representative of a class. But, however this may be, sentiment must give way to the absolute necessity which exists for the constitution of an authority for the efficient administration of the domestic affairs of each county, and no board could undertake this duty which is not directly elected by those who have to find the means for its operations. We believe that Mr. RITCHIE has acted wisely in setting aside the suggestions to constitute his authorities in any other way than by direct election, and in trusting to the nature of their functions to engage the services of those who have important interests in the counties. By adopting this course he is sure to win the support of many who would otherwise oppose the measure, and there is much to be said in favour of the view that the method which is recognised as proper for the constitution of Parliament should not be less suited for that of county boards. The powers these boards will exercise are considerable. In addition to those which now devolve upon the existing local authorities, they will further be entrusted with all (except the judicial) duties of Quarter Sessions and with important functions now belonging to the Board of Trade and to the Local Government Board. The latter board will, indeed, apparently be denuded of its administrative offices under the Public Health Act, and it will remain for the county councils to compel the district councils to perform their public health duties.

Perhaps the part of Mr. RITCHIE'S speech which elicited most approval was that which showed the beginning of the end of the present metropolitan governments. The terms in which he spoke of the past action of the Metropolitan Board of Works were well chosen. Much that has been done by that Board deserves approval. But the fact remains that the Board has failed conspicuously to rise to the position it might have attained. To confer upon it further powers is impossible, and it cannot be permitted to stand in the way of the reconstruction of metropolitan administration. Indeed, its very constitution renders it impossible that it should ever undertake duties which in other parts of the country are to be performed by boards directly elected by the ratepayers. It is therefore proposed that it shall be dissolved. The improvement of London government is, however, not seriously undertaken in the Bill which is now before Parliament. This remains yet to be considered, but the Government propose to introduce a measure for this purpose as soon as the present Bill shall have passed through the House. The lines upon which further changes will be effected are, however, already sufficiently indicated, and no better beginning can be made than the constitution of an authority for the county of London.

It is impossible to discuss in detail the Local Government Bill until it has been printed, but it must be admitted that the admirable statement of Mr. RITCHIE shows it to be of a character likely to command the approval of the more thoughtful members of both sides of the House. Local government is fortunately outside party politics, and it may be hoped that no desire to discomfit the present Government will damage the prospect of this much-needed measure becoming law.

THE profession will share with us a feeling of much satisfaction that Sir WILLIAM GULL is so far recovered as to

have directed the publication of the case of anorexia nervosa, which, with very striking illustrations, appeared in our impression of last week. The brevity and pithiness of Sir WILLIAM'S account of the case are a happy proof that his keen clinical perceptions have suffered no abatement. There is, in truth, a delighful simplicity in the picture of the case, and in the description of the treatment which revived the sleeping functions of nutrition, wherever they may reside. According to Sir WILLIAM'S theory, as set forth in his well-known paper to the Clinical Society in 1873, the disease consists in a failure of the powers of the gastric branches of the pneumogastric nerves. In his last week's paper he takes a deeper view than this of the nature of such cases, and suggests that they are caused, and that their course is determined, by "perversion of the *ego*." Mr. HOVELL is delighted that Sir WILLIAM has abandoned the adjective *Hysterica* in favour of *Nervosa*, and indeed it is to Sir WILLIAM'S credit that he was one of the earliest physicians to object to the use of the word hysterical, with its misleading etymological suggestions. He did so very clearly in the Address on Medicine at Oxford in 1868, which is probably one of the ablest and most suggestive pieces of medical writing that has proceeded from any physician in this generation. Without following Sir WILLIAM at present in his theory of the disease, we may recall for the benefit of our readers the chief points in the graphic picture of the disease, and the simplicity of the treatment. The patients are generally young girls from fourteen and upwards, though we have known a striking case at a much earlier age. The disease may, however, occur in males. The great feature of the cases is complete anorexia leading to extreme emaciation, with slow pulse, subnormal temperature, and very few respirations. Strange to say, there is associated with these depressed functions a remarkable restlessness, a disposition to be moving or walking about, though the patient is an object of remark in the street. There is an entire absence of signs and symptoms of tubercular or other organic disease. The cure consists of three things—rest, warmth, and the regular and frequent introduction of food, in utter disregard of the anorexia of the patient. An efficient nurse is essential. Medicine seems to be of little or no use; massage is not mentioned. Most of the cases seem to occur in the colder months of the year, and possibly this may be more than a coincidence. We commend the cases and the vivid portraits of them to the consideration of the profession. Three cases will be found in the seventh volume of the Reports of the Clinical Society.

Annotations.

"Ne quid nimis."

ARMY MEDICAL RESERVE OF OFFICERS.

THE recent policy of the Secretary of State for War, as shown in the reorganisation of the War Office and intimated in his memorandum on the Army Estimates, seems to call for the exercise of great caution on the part of the medical officers of the auxiliary forces before they consent to join the Army Medical Reserve of Officers about to be formed under the Royal Warrant of February 18th. With most of the rules drawn up by the Secretary of State in accordance with the terms of the Warrant no fault can be found, as their object is to ensure the efficiency of the reserve; but it must not be forgotten that it will be in his power at any time to alter these rules. The officers are to "act under the orders, for administrative purposes, of the Director-General of the Army Medical Department." But under the new organisation of the War Office the Director-General is no longer the head of an independent branch, with power to bring everything he thinks desirable under the immediate consideration of the Secretary of State, but is now subordinate to the Adjutant-and Quartermasters-General, through whom all matters relating to the department must be submitted to the Commander-in-chief. Those who remember the line of conduct adopted by the Horse Guards towards the medical officers with regard to the Warrant of 1858, known well as Lord Herbert's Warrant, will fully appreciate the necessity for caution before taking any step which will place them irrevocably under such an authority. The sixth rule however, is one which seems to require special consideration: "Medical officers of the auxiliary forces who may be permitted to join the Army Medical Reserve shall undertake to accept the charge of the officers and men of any detachment of troops, not having an officer of the medical staff attached to it, at any station at which they may reside, with the rates of remuneration laid down in Article 354 of the Royal Warrant for pay &c., 1887." Medical practitioners must recollect that when enrolled they will be under the orders of the military authorities, and will be bound to obey them, however inconvenient or destructive of their private practice these may prove to be. In the instructions it is also stated that they "shall be liable to be called to army service at home, in times of great national emergency, to take the place of such of the Medical Staff of the army as may be withdrawn for active service." This, of course, implies that they may be sent, under such circumstances, to any place in the United Kingdom to which the military authorities may think fit to order them. Under the present organisation they could only be sent with the corps of which they are the appointed medical officers; under the new one they could be sent independently, and moved whenever and wherever it may be thought advisable. The Warrant appears to be designed in a great measure to enable the War Office to reduce the numbers of medical officers on home service, replacing them in this manner by the officers of the Medical Reserve on the cheapest possible terms. We feel it our duty to caution our brethren in practice to consider well the risks they may run, without, as it appears to us, anything in the shape of a compensating advantage.

ST. ANDREWS AND DUNDEE.

THE relationships of the University of St. Andrews and the College of Science at Dundee are becoming of serious moment to the friends of both places. The old seat of learning, famous through many ages, has name and fame; the young school has ambition and, it is said, wealth, as well as youth and activity. The two institutions are too near each other to be enemies, and yet the most supreme difficulties lie in the way to prevent what many desire to secure—their friendly and complete union. The young institution is asking too much of the old, and the old is tenacious to retain its own. The real pretensions of Dundee are that it should take all the Science, and that St. Andrews should simply retain the Divinity and the Arts chairs. This means nothing more and nothing less than that St. Andrews should resign her chairs of Chemistry, Natural History, Anatomy and Medicine, and possibly her Natural Philosophy. It is hardly in nature to suppose that so much can be conceded, and we do not for a moment believe that any government would be willing to permit such a concession, since it would be one not merely casting a reflection on the old school of learning, so full of great memories, but most detrimental

to the many living graduates who hold and prize its degree. At the same time, if a fair compromise could be arrived at it would be to the best interests of all concerned; the places are most happily united for the finest educational work, and nothing better can be conceived than the idea of student residence on the sea in an ancient seat of learning, combined with the advantages of a practical school in a large and flourishing commercial centre. The promise is too good to let go without a struggle to realise it, and we should be glad if we could say ever so slight a word that would assist to bring about an amalgamation. The task ought not to be difficult; indeed, the basis of agreement seems to suggest itself quite naturally. In plain terms, the whole point in dispute lies with the Medical Faculty and the constitution of the medical school. Dundee is in possession of a hospital and of all the clinical and practical departments of medicine. St. Andrews is in possession of all the theoretical departments. Why should not this division of advantages settle every difficulty. Let St. Andrews retain Anatomy, Physiology, Chemistry, and Natural History, with Botany and Materia Medica superadded. Let Dundee take Practical and Clinical Medicine and Surgery, Midwifery, Forensic Medicine with Medical Jurisprudence, and Pathology, together with the chairs of special departments of medical practice, and there would be raised a complete medical school — a school which ought to work in perfect harmony and usefulness. Since our attention was called to the subject related above, we have received intimation that the students of St. Andrews have held a public meeting on the matter, and by a large majority have voted against the proposed amalgamation, at the same time referring the question to the consideration of the St. Andrews Graduates' Association. As this Association is composed mainly, though not exclusively, of medical graduates, and as it has its headquarters in London, apart from all local disturbing influences, the students probably think that the question will be discussed by the London Council of Graduates without prejudice. If any such deliberation does take place, we also shall wait for the result, in the hope that it may lead to a fair and successful reconciliation of the existing difficulties.

MASON v. MARSHALL, SHAW, AND GAUCHARD.

THE action just concluded at the Western Assizes affords another striking example of the dangers undergone by conscientious medical men in signing certificates of lunacy. Dr. Marshall and Dr. Shaw, the two defendants, with whom we most heartily sympathise for the loss of time and the expense to which they have been subjected, gave evidence which to those conversant with the subject will appear amply sufficient to justify the verdict in their favour. Dr. Bonville Fox also gave valuable confirmatory evidence. He stated, "When she (the plaintiff) was asked why she did the various things complained of, she replied she 'was told to do it.' She said she heard noises in her ears, and voices which she would obey and take as the guides of her conduct." Mr. Martin, chief clerk, produced a letter written by the plaintiff to the Lunacy Commissioners, in which are found the words, "I am almost perpetually in a state of trance. While in that state I have made myself out to be a bad character." And strong proof that the defendants—namely, Drs. Marshall and Shaw—acted *bonâ fide* was that produced by Mr. Bucknill, Q.C., who stated that the plaintiff had been examined on eight occasions by visiting justices and the Lunacy Commissioners, who all said she was properly detained. Madame Gauchard in our opinion, is free from all blame. She stated that the plaintiff was constantly crying and refused food, and in her anxiety to save the life of the plaintiff she called in medical men, whose certificates would consign her to a place where refusal of food could be overcome by persuasion or other methods. The remarks of Mr. Justice Field, although most favourable to the defendants, can afford them but meagre compensation. He remarked that "the action was one of a very painful kind. It was most important that insanity should be taken in its incipient stage, when alone, as it appeared, there was a possibility that by proper treatment the patient might be cured." Again, with regard to medical men, "if it were to come to this that no respectable medical man would put his hand to a certificate it would be a most unfortunate thing for patients themselves" (and for the public the learned judge might have added). The next sentence is still more important. "No doctor was bound to act," said the judge," but if he acted, he undertook a duty and was responsible for any breach of it." His remarks later on would have been strengthened by the statement that the common law, independently of the law of lunacy, will protect anybody, whether a medical man or not, who undertakes to restrain any dangerous person whatsoever, whether lunatic or not. "If the conduct and behaviour of a person," he said, "were such as to lead reasonable men to believe that danger would ensue, or serious consequences might happen, unless a certain amount of reasonable restraint were applied, such restraint was lawful." It need scarcely be stated that the verdict was in favour of the defendants—that is, those medical men who had conscientiously certified to the condition of the patient, and the lady who, by her judicious interference, probably saved the life of the patient by placing her in the hands of those who understood the administration of food. The lessons to be learned from the trial are very obvious. In the first place, medical men must be legally protected against these vexatious trials. If not, they will one and all refuse to certify. Failing this, they have still the alternative of protecting themselves by insisting upon the relatives (as many as possible) signing an indemnification, properly drawn up by legal authorities, which should provide for compensation in some degree for the loss of time and money, and if possible for the annoyance entailed by actions against those who are endeavouring to do their duty to the profession, the patient, and the public.

THE INDIAN MEDICAL SERVICE.

IN the interests alike of the army and the profession, we very recently called attention to the injustice done to the Army Medical Service in the reorganisation of the War Office, and to the serious injury to the senior medical officers foreshadowed in Mr. Stanhope's memorandum in anticipation of the Estimates. We deeply regret to find that a similar feeling of hostility to and disregard of the rights of the Indian medical officers has been manifested by the military authorities in India. In 1881 the appointment of honorary surgeon to the Viceroy was created by the Marquis of Ripon; three medical officers of the army and three of the Indian Service were selected for that honour, and were authorised, as a mark of distinction, to wear an aiguilette similar to that worn by the aides-de-camp to the Governor-General. On January 21st, 1888, the following memorandum, signed by the Military Secretary, was issued "by command": "Exception having been taken by the military authorities to the surgeons of the Viceroy wearing an aiguilette, it was proposed that a sash similar to that worn by the honorary surgeons to the Queen should be worn instead of the aiguilette. This was referred home, and the request has been refused by the home authorities. It is hereby notified that that part of the circular dated Dec. 18th, 1881, referring to the wearing of aiguilettes is entirely cancelled, and the gold aiguilette is not to be worn in future by honorary surgeons to his Excellency." If we had not the authority of the Military

Secretary for the statement, we should have been slow to believe "the military authorities" capable of such petty jealousy as to wish to deprive medical officers of a distinction conferred upon a very limited number by the Viceroy of India, and which they had enjoyed for the last six years. It is still more difficult to understand how such a man as Sir F. Roberts, as Commander-in-Chief, could have sanctioned such an unworthy proceeding. The distinction was conferred upon these officers, not at their own request, but by order of the Governor-General of India; the withdrawal of it, therefore, cannot be looked upon in any other light than that of an unmerited indignity. We trust that the Marquis of Ripon, by whom the appointments and distinctive decoration were introduced into the Indian Service, will not fail to notice such a gratuitous insult to the men whom he considered it right to honour. If "the military authorities" are permitted in this manner to withdraw from the medical officers privileges which have been conferred on them by a still higher authority, it cannot fail to create such a feeling of distrust that no man having the slightest self-respect will care to enter the service. We would recommend to the serious consideration of the Government the consequences which followed a similar course in the case of the Medical Warrant of 1858, the cost involved in restoring the confidence of the profession in the authorities, which had been forfeited by the tampering with the provisions of that Warrant, and the very efficient condition to which the medical service has since been brought under a liberal policy and a judicious system of departmental administration. If the old course of repression, distrust, breach of faith as regards conditions of service, and the withdrawal of an equitable share of honours and honorary distinctions be again adopted, it will raise such a feeling of indignation in the profession as to cut off entirely the supply of well-qualified candidates for admission to the service, and will ultimately cost the country more than we care to anticipate in the health of the troops, the efficiency of the department, and the amount of money which will be required to bring the service again into a satisfactory condition.

THE NOTIFICATION OF INFECTIOUS DISEASES.

FOLLOWING on the various efforts that have recently been made to secure an extension of the system of compulsory notification of infectious diseases, the Association of Municipal Corporations, at a meeting on March 8th, carried a resolution to the effect—"That a memorial be presented to the Local Government Board praying them to introduce, or to give active support to, a Bill for the compulsory notification of infectious diseases throughout the country, and that the Council be requested to give effect to this resolution." The resolution was moved by the Mayor of Salford, and it followed soon after the issue by Dr. Tatham of a report, prepared at the request of the Local Government Board, on the working of the notification system in Salford. In that report Dr. Tatham, having given an account of the extent to which the notification has been carried out, explains the system of inspection and visit which immediately follow in every case after receipt of the information at the health office; he states that in more than half the cases reported, isolation in hospital has been secured; and he explains the various measures adopted in instances where the patients remain in their own homes. Dr. Tatham does not seem so certain, as some officers of health have been, as to the absence of non-reported cases, but he expresses a belief that, as a rule, the medical practitioners in the borough loyally support the Health Department in their duties under the Notification Act; and he states, as regards such practical difficulties as may have been met with, that they are gradually disappearing under the system of education which the Act itself is bringing about. So far as results are concerned, there is no question that with regard to small-pox and typhus the notification system in Salford has had a marked influence for good, and that occurrences of these diseases have in consequence been materially limited. With respect to scarlet fever, Dr. Tatham feels that a sufficient period has not yet elapsed to enable him to draw any trustworthy conclusion, but he adds the fact that the death-rate from that disease since the Notification Act came into force has been lower than during the immediately preceding quinquennium by not less than 38 per cent. Reviewing the results as a whole, it is maintained that the merely local character of the Notification Act constitutes the main drawback to the system, and an instance is referred to which shows how an infectious disease may creep up to the boundaries of a town which has gone to the expense of securing notification and of providing hospital accommodation, and this all but unknown, until it has reached proportions that are difficult to cope with. For this reason a hope is expressed that a publication of the attacks from infectious diseases in the notifying towns will before long be issued at short and regular intervals; and it is evidently held that the duty of carrying this out devolves on the department of State professing to deal with matters affecting public health. If notification were made general under statute, local opposition to the publicity could hardly be made; but the regular compilation of the returns would be a matter involving a by no means small organisation; whereas, on the other hand, so long as only a limited number of towns and districts adopt the system voluntarily, there would, we fear, be a disinclination on the part of a certain number of them to make known their state as regards disease prevalence. But matters are tending in the direction of the publicity demanded, and we have quite recently drawn attention to the initiative taken by the borough of Salford in compiling and issuing the existing data in as complete a manner as the returns received from the notifying towns make such publicity possible.

THE OATHS BILL.

Now that the question of oaths and affirmations is again being considered by the House of Commons, it may not be unprofitable to draw attention to the mode of administering the oath, a matter which has been discussed in THE LANCET on several previous occasions. It is a subject of much interest to members of the medical profession, since they are called upon more frequently than any other professional men to enter the witness-box and to be sworn, the only exceptions being those who are members of the Society of Friends, who may affirm. But it is a matter which concerns everyone who may be called upon to give evidence to serve as a juror, interpreter, bailiff, or in any manner which requires being previously sworn. In other words, the administration of the oath is of general interest. All who do not affirm are sworn either on the New or Old Testament, a copy of which they are required to place against their lips. This "kissing" of a book which has been already handled and kissed by many previous witnesses is an ordeal from which many shrink, and with great reason. To say the least, it is an uncleanly proceeding, and, seeing that witnesses and jurors may have come from a home where an infectious disease is present, it is not wholly free from danger. A medical witness in the Divorce Court objected to be sworn on a Testament which had been previously kissed by two prostitutes. The learned judge and counsel were amused at the objection, and suggested that kissing the open book might do away with the difficulty. This, which is really a prerogative of Royalty, is often resorted to, but does not remove the objection. The remedy is not far to seek, and is very simple. In Scotland and the Channel Islands witnesses are sworn differently. Each holds up the right

hand and repeats the form of oath. Now that it is proposed to allow persons to choose whether they will take an oath or affirm, it would only be reasonable to allow them to choose whether they will be sworn in the English or Scotch method. A still better course would be to make the latter the uniform system for the three kingdoms. The matter is well worthy of the attention of members of the House of Commons.

ARTERIAL AUSCULTATION.

APART from aneurysmal bruits and the conduction of murmurs generated at the aortic orifice, the practice of auscultation of the arteries is not of much service. Yet the subject has often received attention, with comparatively little profit. Perhaps the chief difficulty towards a clear distinction of the sounds audible over the larger arteries lies in the fallacies due to the pressure produced on the vessel, and other conditions of which we are ignorant. Where, for example, is to be found a satisfactory explanation of the "subclavian murmur," at one time wrongly held to be distinctive of commencing tubercular deposit in the apex of the lung? Dr. H. Hockhaus, of the Friedrichshain Hospital, Berlin, has made a number of observations upon auscultation of the femoral artery in health and disease (Virch. *Archiv*, cxi., Hft. 3), in which he somewhat extends the conclusions arrived at by Weil in his work on auscultation of arteries and veins (Leipsic, 1875). For the results obtained by Dr. Hockhaus are thus stated. 1. Pressure murmur and pressure tone are usually perceived in normal as well as in pathological cases; it is only where there is marked atheroma that the pressure tone cannot be produced, owing to the loss of elasticity of the arterial wall. 2. A spontaneous tone is heard (*a*) always in aortic incompetence, because the diastolic expansion of the artery is notably increased by the action of the hypertrophied left ventricle; (*b*) nearly always in uncompensated mitral regurgitation, in anæmia, and in febrile diseases, because in these affections the initial tension in the arterial system is lowered, whilst the maximum tension (during diastolic expansion of the vessel) remains, so that a marked difference is caused between them. 3. The double tone noted by Traube was seldom observed in cases of aortic regurgitation; but a diastolic double tone, due to irregular contraction of the ventricle, was more common. 4. The diastolic and systolic murmur (double souffle of Durosiez) is heard in all well-marked cases of aortic regurgitation, often also in combined aortic incompetence and stenosis; for the former it is pathognomonic, although it has in isolated instances been met with in typhoid fever, anæmia, and atheroma. Both murmurs are due to narrowing of the vessel. 5. With the exception of aortic regurgitation, auscultation of the femoral artery is of no prognostic or diagnostic value in disease.

COUNTY GOVERNMENT AND COUNTY MORTALITY.

THE probable influence of the proposed County Government Bill upon sanitation in counties is a point of view from which the measure should receive the most searching examination in the interest of public health. If the County Council can be made the means of infusing more reality and life into our sanitary system, especially in mining and manufacturing districts outside our largest towns, the rate of our health progress will be materially accelerated; but it remains to be seen how it is proposed to bring this about. The Registrar-General has just issued, as a brief Parliamentary paper of four pages, his "General Abstract of Marriages, Births, and Deaths registered in England and Wales in 1887," which affords the means for calculating the rates of mortality prevailing in the several registration counties during last year. In the last Quarterly Return we were told that the death-rate in England and Wales in 1887 was 18·8 per 1000, a lower rate than has prevailed in any year since the commencement of civil registration in 1837. The recorded death-rates in the English counties during last year ranged from 15·1 in the extra-metropolitan portion of Surrey and in Sussex, to 21·1 in Northumberland and 22·0 in Lancashire. It must, however, be borne in mind that death-rates in rural and in urban populations are not really comparable until they have been corrected for the disturbing influence of varying age-distribution. The effect of this different age-distribution overstates all rural death-rates, and understates all urban death-rates. After the necessary correction, it appears that the county death-rates in 1887 ranged from 14·1 in Huntingdonshire, 14·7 in Sussex, 15·2 in Shropshire, and 15·3 in Westmoreland, to 20·2 in Monmouthshire, 20·9 in the West Riding, 21·1 in Northumberland, and 23·6 in Lancashire. Thus, disregarding Huntingdonshire as a very small county, the death-rate last year in Lancashire was as 160 to 100 in Sussex. Even these startling figures under-state the excess of mortality in Lancashire due to the health disabilities of its urban population. There is yet another, and a by no means inconsiderable, disturbing influence, which unduly raises the recorded rates of rural populations, and unduly depresses those of urban populations. The large and increasing aggregation in towns denudes the rural districts of their healthiest and most vigorous population, necessarily exercising a favourable effect on town death-rates; while the rural districts retain the whole of their sickly, halt, and maimed population. The influence of this migration does not, however, stop here. A very large proportion of this aggregate rural population in towns—consisting mainly of domestic servants and shop assistants—are to a great extent only migratory inhabitants of towns; and when health fails, the result of town life and occupation, a large and unknown proportion of these country-born town residents return with broken health to raise the death-rate of their native rural districts. Our present system of mortality statistics does not afford us the means for measuring or correcting this disturbing influence; but it is none the less real on this account. If due correction could be made for all the disturbing influences above alluded to, it would probably be found that mortality in Lancashire is not far short of double that which prevails in Sussex. Who can say, moreover that the rate of mortality in Sussex is not susceptible of reduction? It is easy to see what wide possibilities of further health-progress open themselves to an improved system of sanitary organisation which should be inaugurated under the new County Government Bill.

THE ORIGIN OF SMALL-POX IN LEEDS.

AT a recent meeting of the Yorkshire Association of Medical Officers of Health Dr. Goldie stated that ninety-six people had been attacked with small-pox in the borough; and he described the measures of revaccination, isolation, and disinfection which had been taken, with very satisfactory results, to stay the spread of the disease. In referring to the second occurrence of the disease in Leeds, he stated that he had been altogether unable to trace its origin, and he is reported to have asked whether it was possible that the insanitary state of the residence of the sick and its dirty surroundings could have had "any share" in the production of the specific poison. The poison of small-pox has a stability in this climate, and under all known conditions, which altogether forbid the notion that it can all at once be developed and brought to final maturity by any such circumstances as are referred to in Leeds; and if the specific poison was introduced into the systems of the persons affected in any other way, we know of no grounds which make it necessary to assume that mere dirt had any share in bringing about the disease. Dr. Goldie

admits that the first incidence of small-pox was due to importation from Sheffield, and, having regard to the diffusion of the disease in different northern districts, the probability, if not the certainty, that the second occurrence did not differ essentially from the first is such that no alternative theory of infection could well be entertained. To give even a vestige of support to any such theory, it would be necessary, in the first instance, to eliminate all possibility of communication, direct or indirect, with an antecedent case; and this, we imagine, would not be a very easy task under the present circumstances affecting Leeds.

THE MEMORANDUM OF THE MEDICAL COUNCIL ON THE QUESTION OF UNQUALIFIED ASSISTANTS.

WE commend to all practitioners the Memorandum of the Medical Council, published on page 592, in which the Council seeks to define the kind of employment of unqualified assistants which would bring registered practitioners under the risk of censure by the Medical Council. There is still a great recklessness in this matter, some practitioners using unqualified assistants in places or circumstances where obviously there can be no adequate supervision of their work by the principal. The public is often quite unaware that the agent of the practitioner is unqualified. In every aspect of it this use of unqualified assistants is unwarrantable, and the Council would fail in its duty if it did not punish those medical men who persist in spite of repeated warnings. It would be lamentable that a name should have to be removed from the Register on this ground, but the Council, in such a case, would be acting for the protection of the public, and the vindication of the law, which aims at making and securing for the public the clearness of the distinction between qualified and unqualified practitioners.

THE POLLUTION OF LOCHS LONG AND GOIL.

THE Secretary for Scotland has received and made public a short series of highly interesting reports upon the pollution of water which takes place in the lochs communicating with the Clyde. We are very far as yet from having grasped the truth that all refuse is only "matter in the wrong place"—to adopt the well-known definition of *dirt;* and at present the public conscience is but little grieved at that enormous and unscrupulous waste which is occasioned by the indolent practice of getting rid of by-products with the minimum of labour, and wholly without regard to their ultimate destination. The result is simply lamentable. The great centres of industry convert the districts in which they are carried on into ruinous wilds or pestilent morasses. And all the while the very matter which, congested and misapplied, is a source of annoyance and of danger, is needed elsewhere, and under a wiser economy would be a source of valuable products, which in its absence cannot be realised in perfection or perhaps cannot be realised at all. The British agriculturist imports manure from South America, while the Londoner puts it to no better use than to pollute the Thames. The authorities in Glasgow seem to be equally guilty. Mr. Fletcher's report attributes the pollution of the lochs to which it refers principally to six causes, of which the first and apparently the principal one is "the dredgings from Glasgow Harbour and other places, which are deposited in Loch Long to the amount of one and a quarter million tons a year; also those from Greenock." Comment upon this proceeding could not be more pointed or more telling than that which Mr. Fletcher makes. "The principal argument," says he, "in favour of the practice is its convenience. Many, however, believe that places of deposit might be found on the banks of the Clyde, where these dredgings would make good land, instead of, as at present, spoiling good water. The amount, if placed with an average thickness of nine feet on the land, so as to raise it above high-water mark, would recover 100 acres every year. There appear to be many portions of the foreshore where this treatment would be suitable, and where the land so recovered would be of considerable value." *Making good land instead of spoiling good water* exactly represents the difference between the good and the bad disposition of dredging refuse, and it forcibly typifies that larger problem of the due economy of waste products which our industrial communities have hardly yet begun to consider.

THE SANITARY CONDITION OF A JUDGE'S LODGINGS.

MR. JUSTICE GRANTHAM, on Tuesday, at the Westmoreland Assizes, commented on the disgracefully insanitary condition of the Judge's lodgings, and explained that he had been obliged to take refuge in rooms in the hotel which the high sheriff had provided for him. He made some very proper observations on the opprobrium which attaches to a town allowing such conditions to exist within it, and it may be hoped that some attention will be paid to his remarks. Apart from the sympathy we may feel for his lordship in his desire to escape illness, we may point out the folly of exposing the country to the loss of the services of a high official for want of the expenditure of a few pounds. We hope Mr. Justice Grantham's colleagues will adopt the same course, and refuse to occupy any lodgings which are not known after careful inspection to be in proper sanitary condition. They would be doing good service to others than themselves, for they would by such means direct attention in the localities they visit to the necessity for a higher standard of sanitary excellence than is probably to be found in these places. By the way, is it not high time that the custom of providing separate lodgings for judges on circuit were discontinued? The idea which gave rise to it has long since died out, and the high-class hotels always existing in assize towns provide accommodation every way superior to anything that can be obtained at private houses.

THE CONVERSION OF CONSOLS.

WE drew attention last week to the serious effect which Mr. Goschen's conversion scheme must have upon many charitable foundations, and, as the unavoidable mischief can only be minimised by prompt action on the part of trustees, it may possibly be useful to repeat here the announcement which has been already made through the ordinary channels that holders of New Three per Cents who wish to signify dissent from the Government scheme, and thus become entitled to payment at par of the amount of stock held, must, if holding for their own benefit, give notice before Thursday next, the 29th inst.; if holding as trustees, they may give the notice at any time before 12th April next. Holders of Consols and Reduced must, if they wish to avail themselves of the Government offer, signify a positive assent by April 12th. The cases, however, will be very few of persons desirous to adopt the course of dissent; indeed, the open market offers a better alternative way of realising the security to such as desire to transfer. The transfer of investments is, indeed, a course which, as we have already said, should, in our view, be adopted as far as possible by the trustees of charitable trusts. It is, however, an operation which can only be safely undertaken with the very greatest care and circumspection, and we should be glad to hear that some of the leading men among trustees of this class were taking counsel together with a view to promoting the general adoption of sound measures with this object.

NEW MEDICAL BILL IN THE BELGIAN PARLIAMENT.

A GOOD deal of interest is being felt in medical and pharmaceutical circles in Belgium in the new Medical Bill which is now before the Chambers. The object of this Bill appears to be mainly to change the condition of things established by a law passed in 1818, in virtue of which a large number of medical practitioners have been allowed the right of dispensing. If the pharmacists had their way this right would be abolished absolutely and at once, but the responsible ministers of the Crown are sagacious enough to see that a permission which has been enjoyed for many years in complete accordance with the existing law confers a kind of vested right, and that it would be utterly unjust to take it away by a mere stroke of the pen. Again, were no exceptions to be made to the hard-and-fast rule forbidding medical men to dispense for their own patients, it is certain that many existing practitioners in country districts would be quite unable to continue to practise, and whole districts would be deprived of their present facilities for obtaining medical advice. The Government, while anxious ultimately to get rid entirely of what is known as the "cumul" or combination of pharmacy with medicine, proposes to compromise matters in this way. The combination is to be formally forbidden, but several exceptions are to be made. Where no pharmacy exists, medical practitioners may obtain, on the recommendation of the provincial medical commission, leave to furnish medicines to their patients for five years, at the end of which time the licence may be renewed or refused. As to the question of vested interests, those practitioners who have been allowed to dispense will be authorised to continue to do so, if they live in rural districts or in small towns for fifteen years, or if they live in larger towns for five years. Of course any change in the direction indicated by this law is welcome to the pharmacists. They themselves, however, are about to be more strictly supervised than they have heretofore been, for by a Royal Warrant just issued they will be forbidden to keep more than one pharmacy, near which they must reside; and they may not combine any other business with that of pharmacy except the wholesale drug trade.

TRACHEAL OZÆNA.

ACCORDING to M. Luc and some others, there exists a variety of tracheitis associated with nasal ozæna, but which, once established, evolves independently of the latter. The tracheitis is characterised by the fetidity of its secretions, in which the microscope reveals the presence of micro-organisms similar to those found in the crusts from the nose in cases of ozæna. The scabs on the walls of the trachea do not proceed from the nose, but are autochthonous. The clinical characters of tracheal ozæna consist in expectoration, especially in the morning, of greenish sputa, thick, viscid, and exhaling the peculiar odour of ozæna, and the persistence of the fetor of the breath after thorough cleansing of the nasal fossæ. Laryngoscopically, the crusts may be seen on the walls of the trachea.

DENTAL MECHANICIAN v. DENTIST.

THE prosecution of Mr. Bradley by the British Dental Association for calling himself a dentist, he not being registered, which resulted in conviction and a fine, has not been appealed against as threatened. The defendant has announced his intention to henceforth appear before the public as a "dental mechanician," to which term the Association is not likely to offer any objection. In future, therefore, by this specious title we are to understand an unqualified practitioner, and we trust that the medical profession generally will do all they can to instruct the general public to appreciate the distinction between dental mechanician and dentist or dental surgeon.

DIFFICULTIES OF MEDICAL MEN IN THE HIGHLANDS.

LUXURIOUS RESIDENTS in large towns do not know what it is to live miles away from a medical man. They would be less cynical on the advantages of such a situation if they were actually placed in it for any length of time. There are parts of Norway in which people live thirty miles from the nearest doctor, and scarcely expect to have the help of the profession in their illnesses, even though they be fatal ones. This is a pitiable and grievous state of things, which the State should consider with a little more generosity and care. Such difficulties seem to press in some parts of Scotland. A country doctor, writing to the *Scottish Leader*, says that on the day of his writing he was absolutely prevented by the state of the roads from seeing a patient fourteen miles distant, and that there is a population still further distant which will not be able by any possiblity to obtain the services of any medical man for several days. The district has become so depopulated as not to be able to support a medical practitioner. The writer thinks that when grand schemes of disestablishment, and the consequent distribution of funds, are under consideration, the claims of medical men in poor and thinly populated districts should be remembered.

BUILDING ON SHEPPERTON AIT.

THE erection of a hotel upon Shepperton Ait is the subject of a petition to the Rural Sanitary Authority of the Chertsey district. The consumers of water supplied by the West Surrey Waterworks Company are not unnaturally alarmed at the erection of a building the drainage of which they anticipate will pollute the Thames within a mile of the company's intake. Originally it was proposed to furnish the hotel with earth-closets; now we are told this proposal has been given up; for when application was made to the magistrates for a hotel licence a few days since, a plan was produced showing two cesspools with no outlet and no provision for overflow except a pipe which, it was said, would spread the fluid sewage over the land, the extent of this being about half an acre, besides that to be occupied by the building. The cesspools, moreover, are under high-water mark, and the result is, of course, obvious. The petitioners pray the sanitary authority to take steps to restrain any persons from erecting such building by adding provisions, if necessary, to their bye-laws which will prevent the erection of any dwelling-house upon the Silly Island or upon any similar island or other position within the limits of their authority, which is entirely surrounded by the River Thames. We have already expressed our sense of the danger of river pollution from the increasing number of cesspools on the banks of the Thames, and fully sympathise with the efforts which are being made for their limitation.

VACCINATION IN CHINA.

SMALL-POX is epidemic in Hong Kong, and during the week ending Jan. 28th eighty-eight persons died from this disease. A law has been passed by the Governor and Council making the practice of infant vaccination compulsory in the colony, the Chinese member of the Council stating that his countrymen were strongly in favour of it. A local newspaper sent us by a correspondent enables us to learn something of Chinese thought upon the subject, the article to which we refer being based upon a pamphlet written by a Chinaman named Chang. The object of vaccination, it seems, in China, is to purify the child of the fœtal virus which every child possesses, and which is generated by the passions which gave him birth, and this virus is the attractive cause of small-pox and other ailments. The Chinese anti-vaccinationist evidently accepts this

theory, but comments on the absurdity of attempting to let this virus out in two or three pustules. Mr. Chang, however, has a ready reply: the fœtal virus congregates about the Gate of Life and the Three Passages. He does not say where these are, but on either arm between the shoulder and the elbow are two depressions, the "eddy of purity and cold" and the "lesser estuary," which two communicate by means of veins directly with the Gate of Life. By introducing vaccine, therefore, in the upper part of the arm, it is conveyed by the flowing of the blood along the vein to its goal. For the reason that "blood must be warm before it can flow" (*vide* Chinese text-books), "cold" food must not be given the patient, or rather, to use our popular expression, food which is credited with being "cooling."

A DEATH AFTER TOOTH EXTRACTION.

The *Sheffield Telegraph* gives an account of an inquest held at Stalybridge upon a child aged five years. The child had suffered from toothache and went to a herbalist, who extracted the tooth. There was a good deal of hæmorrhage, and shortly after the child died "from debility from the loss of blood." Whether the herbalist was in any way to blame for want of skill or carelessness during the operation does not appear in this report, but it is not to be expected that his "profession" qualifies him to deal with the more serious accidents and complications which unfortunately do sometimes occur during or after the extraction of teeth. Surely such a sad case as this should have some influence in deterring the public from patronising unqualified practitioners.

THE AITKEN PORTRAIT FUND.

THE Treasurer of the Aitken Portrait Fund requests us to intimate to the subscribers that the portrait of Sir William Aitken, intended for the Mess Room, Netley, will be on view at the artist's (Mr. W. R. Symonds') Art Studios, Holland-park-road, on the 31st inst. and April 1st, between the hours of 3 and 6 o'clock P.M. Mr. Symonds will be pleased to show the picture to subscribers and their friends on presenting their cards.

FEVER IN LONDON.

THE number of cases admitted into the hospitals of the Metropolitan Asylums Board during the week ending March 16th was 105, of which 86 were persons suffering from scarlet fever; this is a decrease of 21 upon the number of the preceding week. Twelve persons suffering from enteric fever and 6 from small-pox were also admitted, 4 of the latter being received from the parish of Bethnal-green—three from one house; while of the other 2, 1 occurred in St. George-in-the-east and 1 in Fulham.

COCAINE AND ITS SALTS.

IN a paper by Dr. B. H. Paul, read before the Pharmaceutical Society on the 14th inst., the author raised several important considerations respecting the variable purity of the salts of cocaine ordinarily met with in commerce. He contended that the increased demand for cocaine had been met by an abundant supply of material of very doubtful composition; indeed, he considered that at the present time the price was much too low to ensure the purity of the salts of cocaine. Referring to the reports of Dr. Squibb in the "Ephemeris of Materia Medica," Dr. Paul said that he could not accept the trade distinction of cocaine salts under the "crystallised" and "granular" forms, since he believed that the hydrochlorate of cocaine never assumed the amorphous condition. Dr. Paul has analysed several specimens of crude cocaine imported from South America, and has found that they contain, not only earthy substances, sodium carbonate and lime salts, but also a waxy substance and traces of petroleum. While these samples are variously represented as containing from 80 to 90 per cent. of alkaloid, Dr. Paul asserts that one sample he examined did not contain more than one-half the reputed quantity of crystallisable hydrochloride. These chemical details will be received with considerable interest by all who have been struck with the different effects resulting from the use of cocaine. They forcibly call to mind the supposed explanation of the cerebral symptoms formerly noted after the use of salicylic acid, and lead to the hope that the numerous instances of so-called cocaine poisoning may eventually be traced to the accidental admixture of foreign substances with a valuable therapeutic agent.

AN INSANITARY DWELLING.

IN a case just decided in the City of London Court (Kelly *v.* Fox), damages for £10 with costs on the higher scale were granted to the plaintiff, who sought compensation by reason of injury from bad drains. The plaintiff took a house in Bayswater, after receiving an assurance that the drains were in perfect order; but it soon appeared that they were faulty, and rats made their way through them into the house. The defendant then spent £20 in some repairs, but Mr. Commissioner Kerr granted the additional sum referred to by way of damages.

FOREIGN UNIVERSITY INTELLIGENCE.

Berlin.—Professor Hertwig of Jena, who has been appointed to the second Professorship of Anatomy, will commence to lecture on Oct. 1st. Dr. Nagel has been appointed Assistant in the out-patient department of Professor Gusserow's Clinic, in place of Dr. Wyder, who is now Professor in Dorpat.

Kazan.—Dr. A. Ponormoff has qualified as *privat docent* in Medicine.

St. Petersburg (Military Medical Academy).—A regulation has been made that a *privat docent* must give at least one free course of lectures every year. Professor Nasilof and Docent V. Popoff have been appointed delegates to represent the Academy at the Congress of French Surgeons.

Vienna.—Dr. M. Leidesdorf, Professor of Mental Diseases, who is now seventy years of age, is about to retire. Dr. Victor Ritter von Hacker has been recognised as *privat docent* in Surgery.

FROM Messrs. Crookes, Odling, and Tidy's report on the composition and quality of daily samples of the water supplied to London during the month of February, it appears that even to a greater extent than in December and January the condition of the water supplied to the metropolis during the month was quite exceptional for the period of the year, and was found, indeed, to fall but little short of that observable in the most favourable of the summer and early autumn months. Doubtless the exceptional condition of the water throughout the past winter, observe the reporters, is traceable primarily to the exceptional drought, the habitual coincidence of a high character of the river supply with the prevalence of drought being one of many general evidences showing the extensive self-purifying power of running water.

THE Alexander Memorial Prize of £50 and a gold medal have been awarded to Surgeon Robert Hammill Firth, F.R.C.S., for the best essay on the "Relations between the Food and Work of the British Soldier." The committee announce as the subject of the next essay, to be sent in by Dec. 31st, 1890, "The Use of Drugs in the Treatment of Disease in the Army."

THE Government of India have, we learn, decided that all literary degrees, such as B.A. and M.A., should for the future be omitted from all notifications in the *Gazette of India;* but that all professional degrees, such as M.B., M.D., or D.D., and all degrees given *honoris causâ*, should be inserted.

WE understand that Mr. Ballance has been recommended for appointment as Surgeon to the Ear Department of St. Thomas's Hospital, vacant by the retirement of Mr. H. H. Clutton.

THE Croonian Lectures, to be delivered by Dr. Donald Macalister in June next, will be on the subject of "Antipyretics."

Pharmacology and Therapeutics.

TREATMENT OF GONORRHŒA BY ANTROPHORES.

DR. HUGO LOHNSTEIN, of Professor Zuelzer's polyclinic in Berlin, has found, as the result of observations on ninety-three cases, that gonorrhœa, both in its acute and chronic form, usually yields more readily to systematic treatment by a kind of medicated soluble bougies called *antrophores* than to other methods. These antrophores are made by Herr Stephan, a pharmaciat in Treuen, Saxony, and consist of a nickel-plated metallic spiral containing a soft medicated material, the basis of which is gelatine and glycerine—the same kind of thing, in fact, as the hektograph and other "graph" compositions are made of. Before the introduction of the bougie the urethra is well syringed out by a Zuelzer's apparatus with a 2 per cent. solution of boracic acid. Regarding this Dr. Lohnstein remarks that the mere passing of urine by the patient is quite insufficient to cleanse the passage from secretion, as anyone may easily convince himself by an examination with the endoscope. As a rule, a single bougie is sufficient during twenty-four hours. Indeed, when the introduction was repeated several times a day no better result was obtained, but, on the contrary, the urethra appeared to be irritated by the instrument. These bougies must be differently applied in acute and chronic cases. In an acute gonorrhœa, where the prostatic portion of the urethra is not affected, the bougie should not be introduced into it, the surgeon being able to tell when the prostate is reached by the greater resistance caused by the circular muscular fibres. In chronic gleet, where the prostatic portion is affected, the bougie should be made to enter it, but ought always to be kept from entering the bladder, which may bring on strangury and even cystitis. The surgeon guards against this by asking the patient to tell him when he feels as if the instrument were in the bowel. He then knows that it is in the prostatic portion. The medicament mostly used by Dr. Lohnstein is thallin. For the first and second day bougies containing 2 per cent. of this substance are employed; even this strength occasionally produces a sensation of burning. On the third and subsequent days a bougie with 5 per cent. of thallin can usually be borne. It is not found advisable to allow patients to introduce the bougies themselves, for they are liable to set up hæmorrhage and to push the instrument into the bladder. In an acute case the thick secretion is usually changed by the second or third day into a thinner and clearer fluid; during the next few days the quantity of this gradually diminishes, and the secretion has generally entirely ceased in from eight to fourteen days' treatment. Complications such as are produced by injections very rarely occurred; epididymitis never; cystitis in two cases only, and in these it was probably due to faulty introduction of the bougies. Several cases were cured that had resisted other measures. The most difficult class of cases to treat is, of course, the chronic form. Here it was often found that, though the secretion could be greatly reduced, any attempt to lengthen the intervals of the introduction of the bougies was liable to be followed by a return to the original condition. Where the prostate and its ejaculatory ducts are affected, it is often necessary to have recourse to bougies of different kinds—e.g., zinc, tannin, rhatany, nitrate of silver, quinine, or sulphoichthyolate of ammonium. Of course, where, instead of the mucous membrane generally being inflamed, there is a small ulcerated patch, these bougies are useless, and the endoscope must be emp'oyed as a guide to special local treatment.

CYANIDE OF MERCURY IN DIPHTHERIA IN SWEDEN.

Dr. H. Selldén, a Swedish provincial medical officer, considers that he is warranted by the results obtained both by himself and numerous colleagues in the treatment of diphtheria by cyanide of mercury in looking upon this drug almost as a specific. During the four years 1879-1882 the official returns of the sickness in the district of Norberg show that 564 persons were attacked by diphtheria, of whom 523 died, a mortality of 92·7 per cent., none of these being treated by cyanide of mercury. During the years 1883-1886, 160 persons suffered from the disease, and of this number 29 died; 132 of these 160 cases had been treated by cyanide of mercury, and of these 132 only one died. Is it possible, asks Dr. Selldén, that this startling difference in the mortality can have been due either to accident or to mistaken diagnosis? On the latter point he assures us that all the 132 cases were well marked with distinct pseudo membrane, swelling of the glands, extremely foul breath, and all the signs of diphtheria which were present in the other and more fatal group of cases. Up to the commencement of the present year Dr. Selldén has treated more than 200 cases of diphtheria with cyanide of mercury, and of these only four have died, three of whom were seen by him too late for much good to be expected from any treatment. He and his colleagues have altogether treated more than 1400 cases in this way, with a total mortality of 69, or about 4·9 per cent. When friends ask him if he does not feel afraid to prescribe so "heroic" a drug for children, he always replies that he would be much more afraid to employ so toxic an agent as chlorate of potash, or to treat cases expectantly. As to the mode in which the cyanide acts, he suggests that by giving oft-repeated small doses the body becomes rapidly so impregnated with mercury that the diphtheria bacilli are unable to move upon it; indeed, he believes that by means of such doses one might allow oneself to be inoculated with diphtheria bacilli with impunity. The formula he recommends is as follows: Cyanide of mercury, two centigrammes; tincture of aconite, two grammes; honey fifty grammes: mix, and give a teaspoonful every fifteen, thirty, or sixty minutes, according to the patient's age. No brushing of the throat is practised. A gargle is prescribed to be used every fifteen minutes, composed of cyanide of mercury in peppermint water, in the proportion of 1 to 10,000. Occasionally, where the cyanide of mercury has not appeared to act as quickly as usual, recourse has been had to the biniodide, with satisfactory results. Dr. Selldén thinks it probable that the subchloride and perchloride may also act in some cases better than the cyanide.

ACETOPHENIDINE.

M. Guerorguiewsky has employed acetophinidine instead of antipyrin. It is a crystalline grey powder, insipid and inodorous, derived from phenol; it is soluble only in twenty parts of alcohol, and is eliminated by the urine, wherein it can be detected by the red colouration with perchloride of iron. In typhoid fever, tuberculosis, erysipelas, and pneumonia, in doses of from fifteen to thirty centigrammes, he found it to act as an antipyretic in from twenty to forty minutes after injection; the pulse and respiration diminishing in frequency, and sweating being induced. It also relieved pain, but doses of fifty or sixty centigrammes are required to effect this end, as in migraine, cephalalgia, and tabetic pains. It never upset the stomach, or modified any of the other functions of the body; in this respect it claims to be superior to antipyrin.

PLEURO-PNEUMONIA.—On the 19th inst., at the Privy Council Office, Viscount Cranbrook, the Lord President, received a deputation from local authorities of Scotland in reference to a proposed inquiry into the causes and treatment of pleuro-pneumonia, and several questions were submitted to the Government for investigation. It was also suggested that the proposed inquiry should be by a Royal Commission. Viscount Cranbrook, in reply, said that he could not promise the appointment of a Royal Commission, but he would promise that there should be a careful inquiry into the matter.

MEMORANDUM
FOR THE
INFORMATION OF MEDICAL PRACTITIONERS IN REGARD TO THE EMPLOYMENT OF UNQUALIFIED ASSISTANTS.

A.—On April 21st, 1883, the General Medical Council passed the following resolution: "That the Council record on its Minutes, for the information of those whom it may concern, that charges of gross misconduct in the employment of unqualified assistants, and charges of dishonest collusion with unqualified practitioners in respect of the signing of medical certificates required for the purposes of any law or lawful contract, are, if brought before the Council, regarded by the Council as charges of infamous conduct under the Medical Act."

B.—On Nov. 20th, 1886, the attention of the Council having been directed to this resolution, it was determined that steps be taken with a view of making it public; accordingly, on July 25th, 1887, the Executive Committee resolved that it should be inserted twice, at an interval of a month apart, as an advertisement, in the following medical journals: THE LANCET, *British Medical Journal*, *Medical Press and Circular*, *Provincial Medical Journal*, *Edinburgh Medical Journal*, *Glasgow Medical Journal*, and *Dublin Medical Journal*.

C.—On Nov. 22nd, 1887, a report was adopted by the General Council stating that, as a consequence of the publication of the foregoing advertisements, a number of letters, chiefly marked "private," on the subject of the employment of unqualified assistants, had been received by the Registrar. This report proceeds as follows: "From these communications, from notices in the newspapers, and also from common report, it is evident that magistrates, coroners, County Court judges, and other representatives of the public sense of justice, as well as medical men themselves, are becoming alive to the professional misconduct of registered practitioners who place patients under the sole charge of unqualified assistants. The administrators of the law regard as implicit fraud any claim of payment for the service of such substitute assistants, when it is represented as 'medical attendance.' This fact is encouraging, for when it is found that the owner of a 'branch practice' cannot get a claim allowed for the services of his unregistered 'substitute,' and, moreover, that the protection of a 'cover' does not enable the unregistered practitioner to recover charges, these two kinds of irregular practice will probably not long continue to exist in this country."

D.—Since the date of the foregoing report, a case of the misemployment of an unqualified assistant has been brought before the notice of the Council and adjudicated upon; and the registered practitioner concerned, having been informed of the grave disapprobation with which the Council regarded his conduct, promised at once to discontinue the practice condemned. Other cases have also been brought under the notice of the Executive Committee.

E.—In the prosecution of their desire to put a stop to this wrongful practice, the following resolution was passed by the General Council on Nov. 26th, 1887: "That it be referred to the Executive Committee to consider under what circumstances a registered medical practitioner would render himself liable to the censure of the Council in reference to the employment of unqualified assistants."

F.—On Feb. 27th, 1888, the Executive Committee, without attempting to make a formal definition of the misconduct in question, reported to the General Council that, in its opinion, "a registered medical practitioner would render himself liable to the censure of the Medical Council in case of the employment of an unqualified assistant in the practice of Medicine, Surgery, or Midwifery on behalf and for the benefit of such registered practitioner, either in complete substitution for his own services, or under circumstances in which due personal supervision and control are not, or cannot be, exercised by the said registered practitioner." The Executive Committee also stated in reference to the procedure known as "covering," that in its view a registered practitioner "covers" an unregistered person when he does, or assists in doing, or is party to, any act which enables such unqualified person to practise as if he were duly qualified. The Executive Committee furthermore called attention to a resolution passed by the General Council on April 21st, 1883 (vol. xx., p. 91), which implies that, in the Council's opinion, "any registered practitioner practising for gain, who knowingly and wilfully deputes a person not registered or qualified to be registered under the Medical Act to professionally treat on his behalf, in any matter requiring professional discretion or skill, any sick or injured person 'should' be subject to the same legal liabilities as a person who falsely represents himself to be a legally qualified medical practitioner; but with special proviso that such enactment 'should' not hinder any duly regulated training of pupils in medical schools or otherwise by legally qualified practitioners, nor the use of trained pupils in partially treating the sick or injured under the direction, supervision, and responsibility of such practitioners, nor any legitimate employment of nurses, midwives, or dispensers."

March 1st, 1888. JOHN MARSHALL, President.

MEDICAL NOTES IN NORTHERN SIBERIA.

A RUSSIAN naval surgeon, Dr. Alexander Bunge, in a paper read before the Naval Medical Society of St. Petersburg, on his experiences during a five years' stay in the province of Yakutsk in Northern Siberia, alludes to many points of interest with regard to that little-known region. In the south of the province the summer, though short, is hot, the temperature in the shade reaching 34° C. In the north, on the other hand, the summer is cold, and there is plenty of rain and wind interspersed with snowstorms. The winter, however, is milder than in the south at a distance from the Arctic Ocean. The usual winter temperature in the south ranges from −50° to −74°. Dr. Bunge did not find, as many travellers have described, a difficulty in breathing and a pain in the chest during intense cold. After severe exercise, however, bronchial catarrh, accompanied by pain and cough, occurred, but rapidly passed off. The population of the immense province of Yakutsk is only about 250,000, consisting mainly of Yakuts, but with a sprinkling of Russians, Tunguses, and Chuckches. The Yakuts have much the appearance of the North American Indians. The women suffer but little in their confinements; they seldom have more than two or three children, and of these about one-half die in infancy. The natives have a simple classification for diseases, dividing them into two classes—Russian and Yakutish. To the first class belong syphilis and small-pox, all other diseases being relegated to the second class. Syphilis seems to have made terrible ravages some twenty-five years ago, all the inhabitants of some villages having died of it. The Government, however, despatched some medical officers to combat the disease, and their efforts were very successful, the amount of syphilis now to be met with being very moderate. Gonorrhœa seems to be almost unknown; small-pox has raged at times very virulently, destroying a large proportion of the population. The native superstition is that this disease travels about in the form of an old woman. Once she brought a child to whom she entrusted the duty of spreading small-pox over the northern portion of the delta of the Lena. A severe snowstorm fortunately killed the child, and the district, which was to have been under its tender tutelage, was freed from small-pox for ever. There is, according to Dr. Bunge, a certain germ of truth in this legend, inasmuch as cold and snowstorms are certainly inimical to the spread of small-pox. During the epidemics the Russians, who were well vaccinated, escaped entirely, while the natives, who were either badly vaccinated or totally unprotected, died to the extent of 50 per cent. Regarding the other great class of diseases, erisipelas seems to be common; catarrhal conjunctivitis and other eye diseases cause a great deal of blindness. Favus, eczema, and scabies are frequently met with. All forms of rheumatism, including rheumatoid arthritis, are, as might be expected from the climate, very rife. Gastric catarrh is constantly met with, being due, as Dr. Bunge thinks, to the diet of the natives, which consists largely of a very strong-smelling fish, coregona albula. The best remedy for this affection was found to be small doses of quinine, taken half an hour before meal s

It is somewhat remarkable that no scurvy exists either among the natives or the Russians in Northern Yakutsk,

but Dr. Bunge saw several cases from the southern districts. Leprosy is not at all uncommon, and the people consider it infectious, and compel those affected to live in separate dwellings. A curious nervous disease called "emeriak" is found here as well as in other parts of Siberia. Rabies is apparently known amongst dogs, but it appears never to be communicated to human beings, even when they are bitten by animals undoubtedly affected. Dr. Bunge thinks this matter ought to be investigated by means of experiments on Pasteur's lines; but Pasteur's treatment was unknown to him while in that isolated position.

FOSTER WHELPS OF THE SHE-WOLF.

THE *Zoologist*, in its March number, reproduces a remarkable pamphlet, which was printed at Plymouth in 1852, and bears the title "An Account of Wolves Nurturing Children in their Dens." The original publication was anonymous; but a copy of the pamphlet, said to be very scarce, in the Zoological Library of the Natural History Museum at South Kensington, bears a memorandum in the handwriting of the late Colonel Hamilton Smith assigning its authorship to Colonel Sleeman, "the well-known officer who had charge of the Thugg inquiries, and who resided long in the forests of India." Such authentication leaves very much to be desired, especially as the European narrator is himself indebted to unknown natives for many of his most interesting details; but the account given is, with all its deficiencies, well worthy the attention of the scientific and of the curious in such matters.

The pamphlet in question gives in all six cases of boys rescued from the maternal care of wolves. In one instance the lad is traced from the moment of his being carried off by a lurking wolf from his parents' side while they were working in the fields to the time when, having been recovered by his mother, after an interval of six years, he escaped from her custody into the jungle. In all the cases certain well-marked features reappear. Thus the effect of association in this way with brutes is to produce not only, as would be supposed, a being in habits and ideas below the lowest type of savage, but also an apparently irremediable defect of mind. Of the first boy it is said: "Captain Nicholetts made him over to the charge of his servants, who take great care of him, but can never get him to speak a word. He is very inoffensive, except when teased, and will then growl surlily at the person who teases him. He has come to eat anything that is thrown to him, but always prefers raw flesh, which he devours most greedily. He will drink a whole pitcher of butter-milk when put before him, without seeming to draw a breath. He can never be induced to keep on any kind of clothing, even in the coldest weather. A quilt stuffed with cotton was given to him when it became very cold this season, but he tore it to pieces, and ate a portion of it, cotton and all, with his bread every day. He is very fond of bones, particularly uncooked ones, which he masticates apparently with as much ease as meat. He has eaten half a lamb at a time without any apparent effort, and is very fond of taking up earth and small stones and eating them. His features are coarse and his countenance repulsive, and he is very filthy in his habits. He continues to be fond of dogs and jackals, and other four-footed animals that come near him, and always allows them to feed with him when they approach." Very much the same account is given of the other victims of this unnatural nurture. A child that was kidnapped at three years of age was recovered at nine years, and of him, too, it is said he used to mutter something, but could never be got to articulate anything distinctly. "The front of his knees and his elbows had got hardened from going on all fours with the wolves. If any clothes are put on him, he takes them off, and commonly tears them in doing so." In one of the cases cited, a father identified his son who had been carried away by wolves at the age of six years, and recovered three or four years afterwards. In this case the deterioration does not appear to have proceeded quite so far. "He understood signs, and heard exceedingly well, and would assist the cultivators in turning trespassing cattle out of the fields when told by signs to do so." Yet even this lad, whose vulpine career had been so comparatively short, "could not talk or utter any very articulate sounds."

The author of the pamphlet expresses some surprise that no case is on record of a grown man found in such association with wolves. He supplies, however, the most probable solution of his own problem when he points out the many perils which such an animal would daily encounter, not only from his strange hosts, who might very possibly prove treacherous under pressure of want, but also from other beasts of prey frequenting the same haunts, to whom his comparatively slow pace and his defenceless position would render him an easy victim. Indeed, if such a lot does actually befall some individuals of the human race, it is permissible to hope that an unkind fate relents at least so far as to shorten the duration of their debased careers.

IRISH MEDICAL SCHOOLS' AND GRADUATES' ASSOCIATION.

THE eleventh annual meeting of the above Association, of which Drs. Stewart and Abraham are the hon. secretaries, was held at 49, Berners-street, London, on the 17th inst. (St. Patrick's Day), when Sir Thomas Crawford, K.C.B., resigned the presidential chair to Professor Alexander Macalister, M.D., F.R.S.

The Annual Report announced a steady increase in the number of members, the total now on the roll being 514, against 466 on St. Patrick's Day, 1887, notwithstanding the loss of four members by death and four by resignation. Much satisfaction was expressed at Sir Thomas Crawford's success in inducing the British Medical Association, at its annual meeting last autumn in Dublin, to pass a resolution condemnatory of monopoly in hospital appointments. The Council is now in communication with the Irish qualifying bodies, and hopes, with their aid, in time to remove some of the disabilities at present affecting Irish degrees and qualifications in England.

The treasurer's accounts showed a balance in favour of the Association of £154 6*s.* 5*d.*

On the nomination of the Council, Dr. Richard Fegan (Blackheath) was appointed President-elect; Brigade Surgeon W. Alexander, M.D., was re-elected honorary treasurer. The following were elected by ballot as the twelve non-official members of Council for 1888-89—viz.: Sir Thomas Crawford, K.C.B., Drs. J. Nicholas Dick, C.B., R.N., Henry Fitzgibbon (Dublin), H. Senger Gabbett (Eastbourne), J. Hill Gibson, W. A. Douglas Lithgow, Richard Heath (St. Leonards), Macnaughton Jones, H. H. E. Phillips (Reading), T. Gilbart-Smith, W. Dickson-Smyth, R.N., and W. H. White. Deputy Inspector-General Lloyd, R.N., and Dr. W. H. Cullimore were elected honorary auditors. A very hearty vote of thanks was accorded to the retiring President for the energy shown by him during his year of office, and especially for the able manner in which, during the Dublin meeting of the British Medical Association, he put forward the arguments against the exclusion of Irish graduates and diplomates from English hospital appointments, his eloquence securing the important result already referred to in the report, although his opponents included some of the most prominent members of the Association.

The annual dinner took place the same evening at the Holborn Restaurant, the President, Professor Macalister, in the chair. Seventy-three members and guests were present.

CONGRESS OF AMERICAN PHYSICIANS AND SURGEONS.

THE following is the preliminary programme of the Congress to be held in Washington, D.C., on Sept. 18th, 19th, and 20th next, over which John S. Billings, M.D., U.S.A., will preside. The vice-presidents (*ex officio*) are as under: D. Hayes Agnew, M.D., Philadelphia, Pa.; Edward L. Keyes, M.D., New York City; Rufus P. Lincoln, M.D., New York City; Alfred L. Loomis, M.D., New York City; William H. Draper, M.D., New York City; Jonathan S. Prout, M.D., Brooklyn, N.Y.; William F. Norris, M.D., Philadelphia, Pa.; James J. Putnam, M.D., Boston, Mass.; I. E. Atkinson, M.D., Baltimore, Md.; Henry P. Bowditch, M.D., Boston, Mass.; and Newton M. Shaffer, M.D., New York City. Chairman of the Executive Committee: William Pepper, M.D., Philadelphia,

Pa. Treasurer: D. B. St. John Roosa, M.D., New York City. Secretary: William H. Carmalt, M.D. New Haven, Conn.

The subjects for report and discussion are arranged as follows:—

On Tuesday, Sept. 18th, papers will be read on "Intestinal Obstruction in its Medical and Surgical Relations," by Dr. Reginald H. Fitz of Boston, Professor of Pathological Anatomy in Harvard University, and Dr. Nicholas Senn of Milwaukee, Professor of Surgery in the College of Physicians and Surgeons in Chicago, Ill. A discussion will follow.

On Wednesday, Sept. 19th, papers will be read on "Cerebral Localisation in its Practical Relations," by Dr. Charles K. Mills of Philadelphia, Professor of Disease of the Mind and Nervous System in the Philadelphia Polyclinic and College for Graduates in Medicine, and Dr. Roswell Park, Professor of Surgery in the Buffalo Medical College, which will be followed by a discussion.

On Thursday, Sept. 20th, an address will be delivered by the President, John S. Billings, M.D., U.S. Army. After the address a general reception will be held in the United States Army Museum building.

BIENNIAL FESTIVAL OF THE ROYAL MEDICAL BENEVOLENT COLLEGE.

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Miss Alexander...	£10	10	0	Rev. J. W. Hicks	£5	5	0
A grateful patient, by R. J. Metcalfe, Esq. ...	2	2	0	In memoriam, J. L. G., per Dr. Jonson	5	5	0
W. Andrews, Esq.	2	2	0	Sir Joseph Lister, Bart....	10	0	0
Wm. Allingham, Esq. ...	10	10	0	John H. Morgan, Esq....	5	5	0
and ann. subscription	2	2	0	W. Withers Moore, M.D.	10	10	0
Lord Burton	10	10	0	Mrs. McCalmont	21	0	0
Lady Burton	10	10	0	Mrs. Maynard	10	10	0
Dr. Bedolphe	1	1	0	Wm. Pollard, Esq.... ...	2	2	0
Sir Wm. Bowman, Bart.	10	10	0	F. D. Pawle, Esq.	3	3	0
E. Lloyd Birkett, M.D....	5	0	0	R. Douglas Powell, M.D.	10	10	0
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W. H. Charlesworth, Esq.	5	5	0	M. F. Sadler, M.D.... ...	1	1	0
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J. G. Davey, M.D.	1	1	0	W. B. Waterlow, Esq ...	10	10	0
J. H. Galton, M.D.... ...	10	10	0	Mrs. W. B. Waterlow ...	5	0	0
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VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

In twenty-eight of the largest English towns 5560 births and 3656 deaths were registered during the week ending March 17th. The annual rate of mortality in these towns, which had been 21·5 and 23·3 per 1000 in the preceding two weeks, declined last week to 20·3, and was lower than in any previous week of this year. During the first eleven weeks of the current quarter the death-rate in these towns averaged 22·2 per 1000, and was 1·7 below the mean rate in the corresponding periods of the ten years 1878-87. The lowest rates in these towns last week were 12·8 in Leicester, 15·5 in Hull, 16·0 in Wolverhampton, and 16·5 in Birmingham. The rates ranged upwards in the other towns to 26·9 in Plymouth, 27·4 in Cardiff, 27·8 in Preston, and 31·6 in Blackburn. The deaths referred to the principal zymotic diseases, which had been 366 and 442 in the previous two weeks, declined last week to 363; they included 148 from whooping-cough, 49 from scarlet fever, 46 from measles, 33 from "fever" (principally enteric), 33 from diphtheria, 30 from diarrhœa, and 24 from small-pox. No death from any of these zymotic diseases was registered last week in Halifax; whereas they caused the highest death-rates in Blackburn, Sheffield, and Plymouth. The greatest mortality from whooping-cough occurred in Brighton, Blackburn, Salford, and Norwich; from scarlet fever in Oldham and Blackburn; from measles in Nottingham and Plymouth; and from "fever" in Cardiff and Derby. The 33 deaths from diphtheria in the twenty-eight towns included 22 in London and 2 in Manchester. Small-pox caused 18 deaths in Sheffield, 2 in Bristol, 2 in Manchester, and 2 in Huddersfield, but not one in London or in any of the twenty-three other large provincial towns. The Metropolitan Asylum Hospital Ships contained 17 small-pox patients on Saturday last, showing a further slight increase upon the low numbers in recent weeks; the Highgate Small-pox Hospital contained no patient at the end of the week. The number of scarlet fever patients in the Metropolitan Asylum Hospitals and in the London Fever Hospital was 1239 on Saturday last, against numbers declining steadily in the preceding fifteen weeks from 2764 to 1280; the 105 cases admitted to these hospitals during the week showed a decline of 20 from the number in the previous week. The causes of 87, or 2·4 per cent., of the deaths in the twenty-eight towns last week were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Sunderland, Portsmouth, Oldham, Preston, Derby, and Plymouth; the largest proportions of uncertified deaths were registered in Blackburn, Sheffield, Bradford, and Hull.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had increased in the preceding four weeks from 22·5 to 24·2 per 1000, declined to 21·0 in the week ending March 17th; this rate exceeded, however, by 0·7 the mean rate during the same week in the twenty-eight large English towns. The rates in the Scotch towns ranged from 10·1 and 12·9 in Greenock and Aberdeen, to 23·6 in Paisley and 26·9 in Glasgow. The 531 deaths in the eight towns showed a decline of 80 from the number in the previous week, and included 16 which were referred to whooping-cough, 9 to measles, 9 to diarrhœa, 5 to "fever," 5 to diphtheria, 3 to scarlet fever, and not one to small-pox; in all, 47 deaths resulted from these principal zymotic diseases, against 66 and 76 in the preceding two weeks. These 47 deaths were equal to an annual rate of 1·9 per 1000, which was 0·1 below the mean rate last week from the same diseases in the twenty-eight English towns. The fatal cases of whooping-cough, which had been 32, 28, and 29 in the preceding three weeks, further declined last week to 16, of which 15 occurred in Glasgow. The 9 fatal cases of measles showed a decline of 5 from the number returned in each of the preceding two weeks, and included 4 in Glasgow and 4 in Edinburgh. The 9 deaths, of which 6 occurred in Glasgow and 3 in Edinburgh, somewhat exceeded the numbers in the previous two weeks. The fatal cases of "fever," diphtheria, and scarlet fever showed in each case a decline from recent weekly numbers; all the 5 deaths from diphtheria and 2 of the 5 deaths from "fever" were returned in Glasgow. The deaths referred to acute diseases of the respiratory organs in the eight towns, which had been 135, 153, and 159 in the preceding three weeks, declined again last week to 137, and were 15 below the number returned in the corresponding week of last year. The causes of 78, or nearly 15 per cent., of the deaths registered in the eight towns during the week were not certified.

HEALTH OF DUBLIN.

The rate of mortality in Dublin, which had been 34·0 and 33·1 per 1000 in the preceding two weeks, further declined to 29·0 in the week ending March 17th. During the first eleven weeks of the current quarter the death-rate in the city averaged 31·8 per 1000, the mean rate during the same period being 22·3 in London and 22·1 in Edinburgh. The 203 deaths in Dublin showed a further decline of 17 from the numbers in the previous two weeks; they included 8 which were referred to "fever," 5 to measles, 3 to scarlet fever, 2 to diarrhœa, 1 to diphtheria, and not one either to small-pox or whooping-cough. Thus the deaths from these principal zymotic diseases, which

Pa. Treasurer: D. B. St. John Roosa, M.D., New York City. Secretary: William H. Carmalt, M.D. New Haven, Conn.

The subjects for report and discussion are arranged as follows:—

On Tuesday, Sept. 18th, papers will be read on "Intestinal Obstruction in its Medical and Surgical Relations," by Dr. Reginald H. Fitz of Boston, Professor of Pathological Anatomy in Harvard University, and Dr. Nicholas Senn of Milwaukee, Professor of Surgery in the College of Physicians and Surgeons in Chicago, Ill. A discussion will follow.

On Wednesday, Sept. 19th, papers will be read on "Cerebral Localisation in its Practical Relations," by Dr. Charles K. Mills of Philadelphia, Professor of Disease of the Mind and Nervous System in the Philadelphia Polyclinic and College for Graduates in Medicine, and Dr. Roswell Park, Professor of Surgery in the Buffalo Medical College, which will be followed by a discussion.

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V. Horsley, Esq.	2	2	0
In memoriam, per Dr. C. Holman	1	0	0
Rev. J. W. Hicks	£5	5	0
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G. Simpson, Esq.	2	2	0
T. Smith, Esq....	10	10	0
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O. Sturges, M.D.	10	10	0
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R. A. Waterworth, M.D.	1	1	0
W. B. Waterlow, Esq ...	10	10	0
Mrs. W. B. Waterlow ...	5	0	0
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VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

IN twenty-eight of the largest English towns 5560 births and 3656 deaths were registered during the week ending March 17th. The annual rate of mortality in these towns, which had been 21·5 and 23·3 per 1000 in the preceding two weeks, declined last week to 20·3, and was lower than in any previous week of this year. During the first eleven weeks of the current quarter the death-rate in these towns averaged 22·2 per 1000, and was 1·7 below the mean rate in the corresponding periods of the ten years 1878-87. The lowest rates in these towns last week were 12·8 in Leicester, 15·5 in Hull, 16·0 in Wolverhampton, and 16·5 in Birmingham. The rates ranged upwards in the other towns to 26·9 in Plymouth, 27·4 in Cardiff, 27·8 in Preston, and 31·6 in Blackburn. The deaths referred to the principal zymotic diseases, which had been 366 and 442 in the previous two weeks, declined last week to 363; they included 148 from whooping-cough, 49 from scarlet fever, 46 from measles, 33 from "fever" (principally enteric), 33 from diphtheria, 30 from diarrhœa, and 24 from small-pox. No death from any of these zymotic diseases was registered last week in Halifax; whereas they caused the highest death-rates in Blackburn, Sheffield, and Plymouth. The greatest mortality from whooping-cough occurred in Brighton, Blackburn, Salford, and Norwich; from scarlet fever in Oldham and Blackburn; from measles in Nottingham and Plymouth; and from "fever" in Cardiff and Derby. The 33 deaths from diphtheria in the twenty-eight towns included 22 in London and 2 in Manchester. Small-pox caused 18 deaths in Sheffield, 2 in Bristol, 2 in Manchester, and 2 in Huddersfield, but not one in London or in any of the twenty-three other large provincial towns. The Metropolitan Asylum Hospital Ships contained 17 small-pox patients on Saturday last, showing a further slight increase upon the low numbers in recent weeks; the Highgate Small-pox Hospital contained no patient at the end of the week. The number of scarlet fever patients in the Metropolitan Asylum Hospitals and in the London Fever Hospital was 1239 on Saturday last, against numbers declining steadily in the preceding fifteen weeks from 2764 to 1280; the 105 cases admitted to these hospitals during the week showed a decline of 20 from the number in the previous week. The causes of 87, or 2·4 per cent., of the deaths in the twenty-eight towns last week were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Sunderland, Portsmouth, Oldham, Preston, Derby, and Plymouth; the largest proportions of uncertified deaths were registered in Blackburn, Sheffield, Bradford, and Hull.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had increased in the preceding four weeks from 22·5 to 24·2 per 1000, declined to 21·0 in the week ending March 17th; this rate exceeded, however, by 0·7 the mean rate during the same week in the twenty-eight large English towns. The rates in the Scotch towns ranged from 10·1 and 12·9 in Greenock and Aberdeen, to 23·6 in Paisley and 26·9 in Glasgow. The 531 deaths in the eight towns showed a decline of 80 from the number in the previous week, and included 16 which were referred to whooping-cough, 9 to measles, 9 to diarrhœa, 5 to "fever," 5 to diphtheria, 3 to scarlet fever, and not one to small-pox; in all, 47 deaths resulted from these principal zymotic diseases, against 66 and 76 in the preceding two weeks. These 47 deaths were equal to an annual rate of 1·9 per 1000, which was 0·1 below the mean rate last week from the same diseases in the twenty-eight English towns. The fatal cases of whooping-cough, which had been 32, 28, and 29 in the preceding three weeks, further declined last week to 16, of which 15 occurred in Glasgow. The 9 fatal cases of measles showed a decline of 5 from the number returned in each of the preceding two weeks, and included 4 in Glasgow and 4 in Edinburgh. The 9 deaths, of which 6 occurred in Glasgow and 3 in Edinburgh, somewhat exceeded the numbers in the previous two weeks. The fatal cases of "fever," diphtheria, and scarlet fever showed in each case a decline from recent weekly numbers; all the 5 deaths from diphtheria and 2 of the 5 deaths from "fever" were returned in Glasgow. The deaths referred to acute diseases of the respiratory organs in the eight towns, which had been 135, 153, and 159 in the preceding three weeks, declined again last week to 137, and were 15 below the number returned in the corresponding week of last year. The causes of 78, or nearly 15 per cent., of the deaths registered in the eight towns during the week were not certified.

HEALTH OF DUBLIN.

The rate of mortality in Dublin, which had been 34·0 and 33·1 per 1000 in the preceding two weeks, further declined to 29·0 in the week ending March 17th. During the first eleven weeks of the current quarter the death-rate in the city averaged 31·8 per 1000, the mean rate during the same period being 22·3 in London and 22·1 in Edinburgh. The 203 deaths in Dublin showed a further decline of 17 from the numbers in the previous two weeks; they included 8 which were referred to "fever," 5 to measles, 3 to scarlet fever, 2 to diarrhœa, 1 to diphtheria, and not one either to small-pox or whooping-cough. Thus the deaths from these principal zymotic diseases, which

had been 25 in each of the previous two weeks, declined last week to 19; they were equal to an annual rate of 2·8 per 1000, the rate from the same diseases being 2·2 in London and 1·6 in Edinburgh. The 8 deaths from "fever" showed a considerable increase upon the numbers returned in recent weeks, and the fatal cases of measles showed a further slight increase upon recent weekly numbers; the deaths from the other zymotic diseases had declined, no fatal case of whooping-cough being returned, against numbers ranging between 10 and 4 in the preceding six weeks. The deaths both of infants and of elderly persons were fewer than the numbers in the previous week. Six inquest cases and 5 deaths from violence were registered; and 67, or nearly one-third, of the deaths occurred in public institutions. The causes of 27, or nearly 14 per cent., of the deaths in the city were not certified.

Correspondence.

"Audi alteram partem."

THE CONSTRUCTION OF HOSPITALS FOR INFECTIOUS CASES.

To the Editors of THE LANCET.

SIRS,—It is not often that I enter into any controversy, but your leader of last week on temporary and permanent hospitals for the infectious sick seems to me to demand a reply. If there is one organ of public opinion which should be first and foremost in all advanced reforms of a sanitary character, it is THE LANCET. But in the argument you pursue respecting the proposition for the erection of a new hospital at Nottingham you appear to me to be holding back progress on the question in hand. Of course it is very easy and conservative to support an old system, whatever its inherent faults may be, and nothing is more natural than to sustain the past on the past. But the evil of this plan is that by its nervous plea of soundness and custom it prevents attempts at reform, and takes the heart out of all who would reasonably make the necessary advances that really belong to the time.

In the matter of a hospital for infectious cases of disease nothing can be more obsolete than to think of building in such a town as Nottingham one that shall be assumed to last a hundred years. This sort of error has, if I mistake not, been more than once exposed in your own pages, and a worse error was never exposed. Even for a general hospital the plan is at fault. The General Hospital at Norwich, built on the most approved principles in the year 1770, and for many years one of the healthiest in the world, became, long before it had lived a century, quite out of date for the purpose for which it was erected; and we see, in the constant patchings up and costly yet most unsatisfactory changes going on in other old hospitals, how necessary it is to take down and reconstruct sick hospitals on the newest principles which the improving knowledge of each decade or two of the age suggests.

But if this be true of general hospitals, how much more true is it of hospitals specially intended for the infectious sick. To saddle a town like Nottingham with an infectious centre endurable for a hundred years is beyond a common error; yet this is what your article is really, under the circumstances, helping to do. I feel confident you do not see the seriousness of the results that will follow the proposed permanent scheme. It will lead to a much greater expense at the outset; it will entail a site which in half the time thought of may be urgently wanted for something else; it will convey the idea that great epidemics, which are really destined to go out of existence under advancing medical science, are, like such hospitals built to receive them, permanent scourges; and, worst of all, it will lead to these results without the slightest necessity. For Nottingham at the present time, at a moderate cost, a hospital for infectious cases, capable of meeting every want, can be erected that may be enlarged or reduced as required, that may be disinfected every day, that may be removed on the shortest notice if removal be necessary, that may admit of easy improvement from time to time, and that may afford the very best accommodation to the sick within it without a possibility, if it be managed with judgment, of doing any injury to those who are not in it.

As to any difficulties in the construction of such a hospital, they are entirely imaginary, and, indeed, have been already practically met. Some years ago, under very pressing circumstances, we erected in the stoneyard in this parish of Marylebone two temporary iron hospitals. They were intended for a passing emergency, and nothing could have been more disadvantageous than the circumstances under which we laboured. The site was not propitious, the time was most limited, and we had no designs of a previous kind to guide us. But our admirable officer of health, the late Dr. Whitmore, drew out some plans which he brought to me for consultation upon; and in a very short time we had all we could want at our command. This effort might be considered almost experimental, and many lines were open for improvement. A gas furnace always alight at the roof of the hospitals, through the flames of which the air could at all times be extracted and its organic products consumed, was one important desideratum. A method that might very easily have been carried out of sweeping the walls and ceiling with a brush of flame was another want; a proper impermeable earthenware surface for the floor, also a very simple improvement if the design had been intended as a permanency, was a third requirement. But these were details only; the one practical fact was that the hospitals, improvised for a particular occasion, served their purpose well, and would have done so, with a few modifications, for many years had they been required. I visited them when quite new, and I inspected them carefully when about to be removed, and there was nothing that was more satisfactory than the condition in which, with all their faults, they remained.[1] The fact is that these structures, if they are properly built at first, are durable beyond expectation. When the Crystal Palace at Sydenham was first erected, many persons declared that it would not stand two years. I heard a distinguished architect say it would not stand five years, and there it is now after a third of a century as sound as ever.

The objection that a hospital of the kind named cannot be heated properly is another of the delusions springing from the principle of "Never try never do." The plain truth is that there is no difficulty whatever. With two walls of iron or a wall of iron on the inside and a wall of wood on the outside, and a good air space between the walls into which warm air can be admitted, the most perfect and equable warming can be secured. With Dr. Bond's stoves the very perfection both of warming and ventilating these comparatively small hospitals would be as simple as A B C.

I need not apologise for having taken up more of your space than I had intended to do when I sat down to write this letter, because the subject treated upon is one second to none in the future of hospital science and management. Nottingham is an important place to set an example. What she does will be followed, for good or for evil, in numbers of our cities and towns. If she now goes to the absurd expense of putting up a hospital for infectious disease, destined, like a Norman fortress, to last for any number of years, she will simply perpetuate a series of great evils. She will prevent the extension of small, inexpensive, and much-required hospitals in other places, and she will inflict on herself an institution which another generation will look upon as out of character even with our own time: an antiquated foundation *ab initio*.

I am, Sirs, yours, &c.,

March 19th, 1888. BENJAMIN WARD RICHARDSON.

*** We regret to differ from our distinguished correspondent on this subject of the provision by sanitary authorities of temporary instead of permanent hospitals for infectious diseases; but in doing so we are influenced by a

[1] These two iron hospitals cost the parish altogether, for building, clothes, furniture, and maintenance (exclusive of food and attendance), the sum of £793 7*s.* 7*d.* They stood for about two years—in 1869-70-71—meeting all the requirements of a severe epidemic of small-pox, and then, being no longer wanted, were pulled down and the materials sold for £125. On closing them, Dr. Whitmore reported that they admitted of being freely ventilated, were free from damp, and that the second one, which was better constructed than the first, was easily kept warm. From his experience of these hospitals, he strongly dissuaded the authorities from erecting a permanent hospital (1) because of the cost; (2) because no reasonable number of such buildings would provide sufficient accommodation should an epidemic become severe, while on the subsidence of such an epidemic they would become comparatively empty. In place of a permanent hospital he recommended the construction, on a suitable site, of temporary iron hospitals, which could be put up in a week if necessary, could be augmented or reduced as circumstances might demand, and could be stowed away and kept in readiness for use when required.

not inconsiderable experience of the actual results which have followed on the erection of these so-called temporary buildings. The terms "permanent" and "temporary" have very different meanings when used by different persons, and we will at once admit that so permanent a "temporary" structure as Dr. Richardson suggests would so far meet our objection to temporary hospitals, as they are generally understood, that we should be ready to admit its sufficiency for the isolation of the infectious sick. But two walls of iron, so put together as to secure the maintenance of an equable temperature in the building by means of a layer of warmed air between them, a ceiling which would admit of being so dealt with by a brush of flame as to ensure the destruction of all organic matter, and a floor so constructed as to stand the same test of fire, which was held at the Nottingham meeting to be "essential," would involve an expense equal to, if not in excess of, that which the ordinary permanent building costs; and it is this question of cost that mainly settles how far a building is to be retained as permanent, or is to be periodically discarded as temporary. But, after all, our comments related to "temporary" hospitals as they have been, and still are, erected by sanitary bodies; and we have the authority of the official report on infectious hospitals for saying that such hospitals have been a great hindrance to the isolation of infectious diseases in this country, and that in this way they have distinctly hindered that progress in controlling the spread of infection which Dr. Richardson desires to promote. Nearly all the temporary buildings put up have utterly failed to effect their intended purposes: both iron and wooden ones have had to be closed because they have been found unfitted to receive the sick during the depth of winter; fatal consequences having at times been directly due to their use. And the temporary hospital of Nottingham itself, having the space between its double wooden walls filled in with sawdust, has been cited as a notable instance of the inability to raise the ward temperature beyond freezing point, although large fires were maintained day and night. We are convinced that Dr. Richardson is in error in regarding so-called permanent hospitals as tending to convey the idea that our infectious scourges are to be permanent, and that the buildings will have to be arranged to meet great epidemics. We have always held that such hospitals should, in so far as permanent structures are concerned, only be of a size to meet such current requirements of a district as will enable the authority to isolate first attacks and so to *prevent epidemics;* and it is precisely in this sense that substantially constructed and fairly attractive buildings, which the sick have no fear of entering promptly and at all seasons, have been so successful; whereas the "temporary" buildings, as they are known in this country, have deterred isolation, and have hence remained empty when they have been most wanted. We believe, however, that on the main point there is less difference of opinion between Dr. Richardson and ourselves than is at first apparent, and that a temporary hospital, embodying all the requirements which he would hold to be necessary, would far more resemble what everyone else is accustomed to call a permanent one than such temporary structures as have commonly been erected in this country.—ED. L.

SIR W. GULL ON ANOREXIA NERVOSA.

To the Editors of THE LANCET.

SIRS,—It is with much interest and satisfaction that I have read this case in your issue of to-day, because it contrasts so favourably with cases of the same kind described by Sir W. Gull in 1873 as anorexia hysterica. I am happy to take this opportunity of acknowledging the graceful courtesy with which Sir W. Gull received my somewhat stringent observations in your journal in December, 1873, on the mental perversion and moral obliquity to which he then referred the same, or rather similar, symptoms. The profession will gladly see Sir W. Gull emerging from the cloud of illness which has lately overshadowed him; and I heartily congratulate him on setting his colleagues at Guy's Hospital the example of mental conviction and moral resolution in departing from their traditions so far as they relate to the Addisonian heresy of uterine irritation in connexion with the hysteric hypothesis. Certain I am that as soon as the conditions of neurokinesis, whether occurring primarily from shock or induced by illness, are known and recognised, the old doctrine of hysteria must disappear. It was only yesterday that I found a paper read by Sir Risdon Bennett before the Hunterian Society in 1866, in which he called attention to the fact that the results of railway accidents, although apparently slight in the first instance, developed subsequently into grave complications. We have seen death from the shock of grief attributed to wilfulness and obstinacy, and a patient with a morbid impression as to her bladder tied up before the student class in the position of lithotomy as a curative proceeding![1] With such instances brought into notice, it is not an unfair inference that "the perversion of *ego*," which Sir W. Gull attributes to the patient, may perhaps with greater force be applied to the profession. Under any circumstances, Sir W. Gull is to be warmly congratulated on the resumption of the *mens sana in corpore sano*—that consummation so devoutly to be wished for. I am, Sirs, yours obediently,

Mansfield-street, W., March 17th, 1888. D. DE BERDT HOVELL.

To the Editors of THE LANCET.

SIRS,—The remarkable case of advanced starvation in a neurotic girl reported by Sir William Gull at p. 516 of this day's LANCET will excite very general interest among members of the medical profession, and especially among those of their number whose duty it is daily to minister to such cases.

This interest will be greatly enhanced by the very striking wood engravings which accompany the description, and which serve so forcibly to illustrate and demonstrate the peculiar features of the case in question, and to show the dire effects on the human countenance and frame of prolonged starvation. Fortunately, cases of the kind, although not of rare occurrence, are generally brought under medical care at an earlier date than this poor girl seems to have been, and the very painful results which ensued in her case are thereby obviated, if all other means fail, by forcible alimentation. The improved instruments and appliances now at our command render forcible administration of nourishment so very simple a process that there need be no hesitation in resorting to it when necessary; these are at once safe and effective, and by their means nutrition can not only be carried on for an indefinite length of time, but the general health be greatly improved, as well as bodily condition. I will narrate briefly a case of the kind in point, that of a young girl also, who has been under my care for 213 days. During the whole of that prolonged period, under the influence of a supposed command from Heaven, she has declined all food and nourishment in the most resolute and decided manner, and to-day (the 654th) feeding in succession by means of the soft elastic tube has of absolute necessity been resorted to. The effect physically has been eminently satisfactory, the general health is infinitely better than it was when forcible alimentation was resorted to in August, 1887, and the weight has greatly increased. I am, Sirs, yours faithfully,

Harley-street, W., March 17th, 1888. JAMES ADAM, M.D.

CIVIL "FIRST AID": LIGHT, WARMTH, AND WATER.

To the Editors of THE LANCET.

SIRS,—May I be allowed a few lines to call attention to a point, which I think has been overlooked, of much importance in the act of rendering first aid to the injured in our climate, particularly in winter. I allude to the absence of apparatus to accompany the litter or stretcher whereby

[1] Dr. Hilton Fagge's Lectures, edited by Dr. T. Pye-Smith.

warmth, light, and water may be conveyed to the injured. I have inquired at the St. John Ambulance offices, but find they have no arrangement for these requirements, either in the waggon or the litter. We all know how depressed the system is after accidents; how difficult it is to restore warmth; and if to this we add exposure to a low temperature on the ground in frosty or wet weather, any amount of blankets or rugs cannot add warmth, only retain what little there remains in the body. One need only picture one's meeting with an accident three or four miles from home, late in the evening, without additional clothing, lying for one or two hours on the damp ground, to realise how some means of conveying heat to the feet and hands would be welcomed. I should be glad if these remarks would bring to light some contrivance already employed, or would set invention moving to supply the want. I may be, perhaps, pardoned if I describe the means by which I have endeavoured to supply these needs in the ambulance centre I formed at Lymington. (1) Light: By a Hincks' stable lamp, burning rock oil (which remains good when out of use); this will burn for twelve hours; it cannot be blown out by wind. To this I had a large tin shade adapted, to shield the eyes when attending to the patient on the ground. This for civil work is better than the military ambulance light for searching, which is not needed when the position of the patient is known. This lamp can be swung between the front arms of the litter, and when the patient is on it should be brought close beneath his feet so as to give warmth; and, again, when the tent is over him the warm air will pass up beneath and so give warmth to the whole body. But to give warmth more decidedly I have added (2) a *copper bottle* of a gallon and a half, tinned within, with a screw plug. It is of concavo-convex shape, for feet or chest, &c. If filled with boiling water and rolled up in a rug, it will be quite hot three hours after, and fairly warm seven hours. When, however, the litter arrives at the injured, the water can be used to drink, mixed with beef extract, spirits, cocoa, &c., readily added to the hamper. (3) I have added a pint water bottle and cup of vulcanite, like that used by the Indian sportsmen; this holds cold water for the injured or the bearers (very grateful for either in hot weather). A wholesome cold water is not easily procured in the country, and the want is much felt. The lamp can be obtained everywhere; with shade, made by any tinman, to fit over handles, the whole costs about 2*s.* 6*d.*; the copper bottle, tinned inside, made by Allen, Marylebone-lane, 15*s.*; the vulcanite bottle and cup, for about 18*s.*, can be got at Silver's, Cornhill; an ordinary tourist's "pocket pistol" might be less. The addition of these three, with a packet of cocoa or tin of beef-juice, with brandy, would not exceed £2 extra. The Volunteer Medical Staff Corps carry searching lanterns and water with them, and in active service would have in cold weather their waggon stove ready to convey some mear giving warmth. The same arrangement also exists in the army; but, except in a great battle, the wounded would be sent quickly to the rear and hospitals, while in civil work the litter would have to be sent for, much time necessarily being taken up for the double journey.

I am, Sirs, your obedient servant,

George-street, Hanover-square, Feb. 22nd. J. BRAXTON HICKS.

THERAPEUTICS v. EXTEMPORANEOUS PHARMACY.

To the Editors of THE LANCET.

SIRS,—As an illustration of the fact that in the treatment of disease a physician may occasionally be very heavily handicapped and his art discredited by the imperfection of his instruments of precision and his specific remedies, I am desirous, with your permission, of publishing in THE LANCET the particulars of a case of recent occurrence which for a time was the cause of considerable anxiety to myself.

In the month of last December I had charge of a very tedious case of confinement in a primipara, which was finally terminated by the forceps, after an illness of three days' continuance. Soon after delivery the patient's temperature began to increase, varying after some days from 102° in the morning to 104° in the evening, culminating at length in an attack of puerperal fever, of that insidious type which exhibits no complication or organic affection. After attending to the ordinary local and constitutional indications, I prescribed quinine (as is my usual practice, and as my most reliable antipyretic and antiseptic), in four-grain doses, repeated every four hours, with duplicate quantities at bedtime. At first the quinine was administered in powder, but after the second dose the patient refused to swallow it, except in the form of pill; and as such it was given during the remainder of her illness. Milk, beef-tea, whisky, and farinaceous diet constituted the principal adjuvants, and to their beneficial influence I may fairly attribute her recovery. Although the dose was fairly large and frequently repeated, it did not produce any perceptible effect either upon the patient or the disease; the only appreciable result was a species of tormina and uneasiness, followed every day by a second evacuation of the bowels, not at all of a loose character. No quinism or head symptoms whatever; no fall of pulse or temperature for many days. The mystery, however, was solved in a satisfactory manner by the nurse, who informed me towards the termination of the attack that for several days the patient had been in the habit of voiding with each motion a number of round pellets, three specimens of which had turned up on that day, and which she handed to me. On examination I found that these objects were in reality three of the identical pills, slightly honeycombed and altered in the coating, but substantially the same as when swallowed by the patient. The pills were dispensed by a firm of the highest character and respectability, and I was assured by the manager that they were not kept in stock, but compounded extemporaneously just as ordered on my prescription. The explanation given was that the cause of their insolubility in the intestinal canal must have been due to the nature of the excipient used in their preparation, which was a compound of gum tragacanth and glycerine, called by Dr. Whitla in his excellent "Manual of Therapeutics and Pharmacology" "Procter's paste," and to their subsequent coating of French chalk. The remedy against such an untoward occurrence appears to consist in a return to the old-fashioned excipient of conserve of roses, or some vegetable extract readily soluble in the gastric and intestinal secretions.

I am the more desirous of inviting the attention of your readers to this subject as there appears to be valid reason for believing in the proximate revival of faith in the efficacy of therapeutic remedies, Galenical and magistral, and that the phase of so-called scientific scepticism in the curative power of well-selected medicines is "fast passing away,"[1] and from the conviction that a repetition of instances such as I have related, through the fault of a dispenser, might possibly produce a prejudicial effect on the movement, and the cloud of unbelief grow darker when on the eve of its dispersion.

I am, Sirs, yours obediently,

March, 1888. ALEXANDER HARKIN, M.D., F.R.C.S.

IMMEDIATE REDUCTION AFTER TENOTOMY.

To the Editors of THE LANCET.

SIRS,—While I quite agree with Mr. Smith that every cautious surgeon should abstain from advocating new methods until well tested, yet I think that every cautious author should either give his readers the full benefit of such experience as he may have at the moment of publication, or delay publishing. To be practising, and yet not even to mention, a plan of treatment giving such superior results to the older method, which is urged both by text and by diagram again and again, appears to me a little hard on those who apply to the book for instruction and guidance. Mr. Smith cannot understand the object of my last letter. Let me say that it was written partly to point to the great difference between his own written doctrine and what appears to be his actual practice; partly to draw attention to my experiments, undertaken with a view to disprove that "imperfect union after tenotomy may occur from too rapid stretching," as stated in his book, p. 57; and partly to support Mr. Marsh's rapid treatment by plaster-of-Paris dressings. As to what is meant by "immediate reduction": to me it simply means immediate reduction; that and nothing more or less. In the same way "rapid reduction" means rapid reduction, neither more nor less. If by the term "immediate reduction" Mr. Smith means anything else, such as "reduction as complete as possible," I fail to

[1] Vide report of a discussion on "Practical Therapeutics," in the Therapeutic Section, British Medical Congress in Dublin, initiated by Sir Andrew Clark, Bart., and given in THE LANCET, August 13th, 1887.

see the *raison d'être* for his criticism of Mr. Marsh, or indeed any practical difference between his own and Mr. Marsh's practice. In the majority of "very severe cases of talipes" little real reduction is possible after a simple tenotomy; while the term "immediate reduction" for such cases would be distinctly inapplicable, not to say misleading. In my former letter I ignored, as Mr. Smith says, "the possibility of deformity depending upon the contraction of one tendon alone." The question was not in dispute. I have given my views on this and other kindred points in a recently published book on "Congenital Club-foot, its Nature and Treatment." Mr. Smith, and others interested in the subject, may like to know that what I have there written embodies my latest experience, as well as my actual practice, without reserve.

I remain, Sirs, yours faithfully,

March 18th, 1888. R. W. PARKER.

THE QUEEN'S VISIT TO FLORENCE.

(From our own Correspondent.)

TORRENTIAL rains, and the Arno careering madly down like a riderless charger, are, I fear, preparing for Her Majesty a reception hardly less churlish than that vouchsafed her just nine years ago on the Lago Maggiore. The Tuscan spring, the favoured theme of poet and painter, is very late this year, and may even delay its coming till long after the Queen has left. Sunshine, the *conditio sine qua non* of Italian nature and art, has held aloof ever since January, and scowling heavens and unrelieved rainfall have been our portion for weeks. The roads are heavy with mire, and almost impracticable for pedestrian or carriage; and the indoor solace, to which picture gallery and church interior invite us, loses half its charm in the defective light. And yet, say the Florentines, things must be worse elsewhere; otherwise, how is it that Florence is still so full?

Full, indeed, she is; wellnigh as much so as in the May of last year, when the unveiling of the façade of her peerless Duomo attracted æsthetic pilgrims from afar. The English-speaking visitor is, as usual, in the ascendant, and not only are the populations of the British Isles, of the colonies, and of the United States represented, but those large communities of our compatriots that permanently reside in Italian cities are now, in great part, concentrated in Florence. Of these Rome sends the heaviest contingent, for, having at length exhausted the excitement of the Papal Jubilee and the enjoyment of the Vatican Exhibition, her English holiday-makers are eager for another and more august attraction in Queen Victoria's first visit to the City of Flowers.

Nothing, however, is likely to be less demonstrative than the Royal sojourn. Inspired as it is by long-cherished sentiment—by the wish to fulfil a project conceived before widowhood,—Her Majesty's visit will be spent in the strictest *incognito*. Even her arrival on the 23rd will be kept as private as possible—no one being admitted within the precincts of the railway terminus but his Excellency Sir J. Savile Lumley, the British Ambassador; Mr. Colnaghi, the Consul-General; the Marchese Torrigiani; the Syndic; and the Senator Gadda, the prefect of the city. Along the line of route from the station to the Villa Palmieri, where the Queen takes up her abode, the British householder may display the national flag, but further demonstration there will be none—a token of respect for Her Majesty's understood wish, which the pageant-loving Florentines will make it their duty to second. In one essential particular, however, the civic authorities are showing their goodwill to their august visitor, and that is in an attention to sanitary police arrangements, not vouchsafed to the Royalties of other nationalities. The regulation of the streets, the cleansing and smoothing of the carriage-ways, the nocturnal lighting of the unfrequented roads between the town gates and the villa, *l'allontanamento di ogni possibile causa di moleste esalazioni* (the removal of every possible source of offensive exhalations)—such are a few of the measures already being taken in homage to the English Queen. If these temporary operations become permanent; if the sanitation of the Florentine streets—happily described by Dr. King Chambers as "Hanway Passages bordered with Newgate Prisons"—is made from an occasional into a standing rule, a step will have been taken for the benefit of the city, from which others must necessarily follow, to the signal advantage of its inhabitants, native and foreign. If Her Majesty fails to bring "Queen's weather," she will have the consolation of having initiated something not less salutary—an innovation in hygienic practice displayed in the cleansed façades and streets, in the purified and sweetened by-ways, which Florence will do well, for her own interests, to perpetuate, as the best of all mementos of her Royal English guest.

Family reasons, the shadow still overhanging the Imperial House of Germany, would also of themselves have sufficed to impose the strictest privacy on Her Majesty's *villeggiatura*. This the Florentines will not fail to respect, sharing as they do the solicitude of Italy's English and German allies, for the health and for the life of one who at San Remo, on Italian soil, was the nation's invalid guest. In keeping with their respect for the Queen's sentiment and sorrow, they will therefore refrain from gratifying a not unnatural curiosity, and leave her Majesty to the enjoyment, unobserved and undisturbed, of those artistic master-works, the contemplation and appreciation of which was to have been one of the long-looked for pleasures of her yet unwidowed years. Even the weekly services of the church will be so ordered for the Queen as to exclude the stranger—the Villa Palmieri having long been provided with its private chaplain. In that delightful retreat—the refuge of Boccaccio's gifted circle of ten during the fearful plague that devastated Florence in 1348—every influence that can soothe and relieve will have full play, and even if the weather should retain the inclement character it has borne during the last seven weeks, there will be much to mitigate it in the novelty and the charm of city and suburb for their accomplished visitor. Healthier situation than that of the Villa Palmieri on the Fiesole slope there is none in the Florentine environs; while its loveliness, even under the grey skies of this unvernal spring, still justifes the noble eulogy of the author of the Elegy penned in the April of 1741:—

> "O Faesulae! amœna
> Frigoribus juga nec nimium spirantibus auris!
> Alma quibus Tusci Pallas decus Apennini
> Esse dedit, glaucâque suâ frondescere silvâ!"

Add to all this that the health of Florence and its neighbourhood has been better this season than for many years past—the "lusty winter, frosty but kindly," seeming to have supplied the vigour and the mental exhilaration to withstand its asperities,—and there is ample warrant for the hope that to "the cares that link with empire" Her Majesty will return as much the better for her Florentine sojourn as any of the most favoured of her subjects.

As I write, I am informed that an address, signed by her subjects now resident in Florence, will be presented in some ten days' time to Her Majesty. The address, written on vellum and illuminated by the celebrated artist in that *genre*, Signor Meacci, will be enclosed in a case specially designed by the well-known *intagliatore*, Giannini. The presentation will, it is understood, be the only occasion on which Her Majesty will modify the strictness of her *incognito*.

SANITARY PROGRESS AT NICE.

(From our Special Correspondent.)

Nice, Jan. 1888.

THE town of Nice has this season achieved some notable sanitary improvements. It is probably the first French town that has applied on a large scale a system for the automatic and continuous flushing of the sewers. Within the last few months no less than 180 automatic flush tanks, constructed by Messrs. Geneste and Herscher, have been introduced into the sewers. These are placed at distances of about 250 metres from each other, and at the highest points or commencement of the various sewers. By this means from 12,000 to 20,000 litres of clean water from the Vesubie river are suddenly and automatically discharged into the sewers every three hours of both the night and the day. But this amount of water, considerable in itself, can and will be augmented. For the old town, it has been decided to utilise the water of

the new and artificial cascade built on the crest of the Castle Hill. Thus this ornamental and novel attraction will have also its useful purpose, and what has contributed to the beauty of the town will help to preserve the health of its inhabitants. The cascade was provided with 150 litres of water per second, which flowed away with some difficulty by the canal of the Allée du Château. An overflow has now been constructed so as to throw all the water into the sewers of the old town, and, further, the amount of water will be more than doubled. When the works are completed no less than 300 to 500 litres of water will fall over the cascade every second, and this must assuredly suffice to thoroughly scour the sewers of the old town.

In various streets the gutters are reconstructed, rendered more even; and it is now proposed to sweep the street mud along the gutters till the openings to the sewers are reached. The street sweepings will then flow down the sewers, thus simplifying considerably the process of scavenging. Of course, before the introduction of automatic flush tanks this measure was not practicable; it would have blocked up the sewers, but as Nice possesses any amount of water it can venture on such experiments. The supply of water is estimated at 13,000 cubic metres per day from the springs of Ste. Thècle; this is reserved for drinking purposes; and then there are 60,000 cubic metres from the Vesubie used for flushing, &c. Close upon thirty-five kilometres of water pipes have been laid down, and 1000 hydrants, placed, for the most part, within a distance of forty metres from each other, are now added, that will throw water to the roofs of the highest houses in case of fire.

These results are all the more creditable, considering that the disasters due to the earthquake, following after two years of cholera panic, might have provided a convenient excuse for neglecting such measures. Nice, however, has not been impoverished by the earthquake. On the contrary, the prosperity of the town has increased, and this is conclusively demonstrated by the municipal receipts. These are derived for the most part from the local dues, or *octroi*, levied on all provisions entering the town, and vary according to the number of visitors present. Calculating the municipal receipts up Dec. 5th last, the income for the year 1887 is set down at 1,997,523 francs, while in 1886 it only amounted to 1,749,251 francs.

In the face of these facts, considering that Nice possesses an abundant water supply (about 1000 litres per day per inhabitant), has the necessary apparatus for automatically flushing the sewers, and is in a favourable financial position, no further time should be lost in abolishing the cesspools that are so constant a source of annoyance and danger. Dr. A. Balestre, Director of the Municipal Bureau of Hygiene, in his able report on "l'Assainissement de Nice," states that, out of 1285 cesspools, he found 281 opening into the houses. This means that when these cesspools are emptied they are emptied within the walls of the house and not in the garden or the street. This is the case as often in luxurious villas as in poorer dwellings. The cesspools are under the building, and have no openings outside. Many of these cesspools have overflows into the sewers, but this overflow only takes place when the cesspool is full—that is, when its contents have had ample time to attain a high degree of fermentation or putrefaction. Nor can the cesspools be considered as water-tight. The acids soon destroy the lime or mortar, and thus the subsoil becomes contaminated. Under these conditions it would not be surprising if typhoid fever were prevalent, particularly as there are no police regulations in force to ensure the trapping of soil and waste water pipes. Dr. Balestre, taking the twenty-three principal towns of England and Germany, and comparing the rates of mortality after and before the application of a general system of drainage, finds that on an average, where formerly there were 100 deaths from typhoid fever, there are now only 47; in other words, 53 lives have been saved out of 100. In the general death-rate the reduction amounts to 18 lives out of 100. If similar results could be achieved at Nice it would mean the saving of 450 lives per annum. There is no reason to doubt that this very desirable result will be attained at no distant date. Enough has already been said to show that the town is moving, and in the right direction. It only requires a little more pressure on the part of the general public. The local practitioners are fully aware of the importance of securing such reforms, and the Society of Medicine and Climatology of Nice has voted unanimously in favour of a general scheme of drainage and the total abolition of cesspools.

NORTHERN COUNTIES NOTES.

(From our own Correspondent.)

THE WEATHER IN THE NORTH.

THE present month, so far, has been a most trying one for patients in the north, but it has also been a most severe one for practitioners. Journeys in some parts (during the past week especially) have been made with great difficulty, and indeed with no small peril. In some cases it was impossible to hold intended consultations, owing to the blocked state of the roads. The coroner's offices, too, have been frequently called into requisition, owing to travellers perishing on moors and exposed situations from cold. I have heard of some very perilous journeys made by coroners over the Durham and Northumberland hills. It has being noticed, too, that the quantity of snow which fell in the north this month was not so great as in the same month last year and the year before, but this year it has drifted more and laid longer, and so made travelling more difficult.

THE LATE SCARLET FEVER OUTBREAK IN NEWCASTLE.

Mr. H. E. Armstrong, our medical officer of health, has printed and circulated a report on the late outbreak of scarlet fever at Jesmond in this city. There has been an extensive outbreak of the disease also at the workhouse, but the present report deals with the private cases only, and that in a widely separate part of the city. It is remarkable, and is very clearly shown in Mr. Armstrong's report, that, of the nineteen cases of the disease certified by practitioners at Jesmond, no less than seventeen had their milk supplied from the same dairy. The health of the cows and the state of the dairy and the *employés* naturally became a matter of inquiry on the part of the health authorities. An inspection was accordingly made by Mr. Clement Stephenson, the chief veterinary inspector for the county, and he certified to the cows (thirty-five in all) being in good health. Mr. Armstrong also found all the workers on the dairy farm healthy, and the place itself in good sanitary condition. The only possible connexion was a workman on the dairy whose children were ill in the month of September last, leaving a history, Mr. Armstrong thinks, that no medical man could but regard as strongly suspicious of being scarlatinal. Then, again, he thinks that the infection of them could scarcely be communicated to the milk after such a lapse of time—namely, from September last to Jan. 31st of this year. He recalls an outbreak here in the Westgate district in 1879, more virulent, however—ten deaths in twenty-three cases. In this instance the milk supply was the common feature, but no disease in the dairies was detected. The inquiry then was difficult and tedious, owing to the want of notification of cases of sickness. On the present occasion there has been no difficulties of this kind.

SILLOTH CONVALESCENT INSTITUTION.

At the annual meeting of the Silloth Convalescent Institution, held last Wednesday at the Town Hall, Carlisle, the Bishop of Carlisle presiding, it was stated that the number of patients during the past year (551) was the largest the institution had had in any one year since its foundation. Patients had been received from Cumberland, Westmoreland, Lancashire, Northumberland, and Scotland. The committee, desirous of attracting patients during the winter, spring, and autumn months, had resolved to expend £2000 in erecting additional rooms and rearranging the existing building. The Bishop read some notes by Dr. Barnes as to the Rev. F. Redford's meteorological observations at Silloth, which demonstrated the remarkable fact that as regards the amount of ozone and the absence of impurity and amount of sunshine Silloth occupied a conspicuous place; that this demonstration, proved by careful observation of many years, had given Silloth a character which had no doubt contributed to its popularity as a health resort.

The collection for hospitals in Westmoreland and Cumberland is fixed to be taken on Sunday, May 13th next.

Newcastle-on-Tyne, March 20th.

FOOTBALL CASUALTY.—During a football match at Reading on the 17th inst., between the Maidenhead Temperance and the Earley Football Clubs, a player in the latter, named H. Cook, had his leg badly fractured.

GLASGOW.

(From our own Correspondent.)

EXTRAORDINARY OUTBREAK OF FEBRILE DISEASE IN AN INDUSTRIAL SCHOOL.

AT a meeting of the Glasgow Town Council held on March 19th, Dr. J. B. Russell gave in his preliminary report on this alarming outbreak. From this it appears that on the evening of March 2nd a boy complained of headache, and was sent to bed in his dormitory. Next morning he rose with the rest at 6 A.M. and made his bed, but was observed to be staggering, and was sent to the sick-room, where he died at 8 A.M. On March 3rd another boy complained of headache, and was sent to the sick-room and put under treatment. On the 5th he became delirious, and died about 4 A.M. These deaths were reported to the Fiscal, as the doctor could not characterise them, but he permitted the interment of the bodies without a post-mortem examination, so that Dr. Russell has lost the advantage of the information which might have been derived therefrom. On the morning of the 8th he found the medical attendant of the institution waiting for him at the office to ask his assistance. Two still more sudden deaths had taken place. One boy had first complained of headache and sickness about 5 P.M. on the 7th, and died comatose within four hours afterwards. Another was found to be unconscious when the boys were called shortly before 6 A.M. that morning (8th), and died in about half an hour. Grouped around these fatal cases nineteen boys were more or less ill. Dr. Russell found that these had all more or less febrile temperatures, and several had symptoms of pneumonia in various stages. A port-mortem examination of the bodies held out the only hope of getting some light on the subject. The general result of this examination was to show that they had to deal with a febrile disease arising from some blood poison, which even in the short illness of these boys had produced local changes suggestive of some alliance to the specific poison of enteric fever. Dr. Coats is engaged in microscopic investigations, and Dr. Maylard has obtained from the living the materials of a bacteriological inquiry. In a few days, therefore, some further light may be thrown on the precise nature of a disease which is strange in their combined experience, and to which in the short time which has elapsed they have not yet discovered anything similar on record. The practical result was that Dr. Russell transferred immediately to a separate ward at Belvidere twelve of the most serious cases. On the 10th three fresh cases were removed, and on the 11th two more —making seventeen in all. There have been no more fatal cases, and though many are seriously ill, there is no immediate prospect of further loss of life. There are 205 inmates in the institution, and there have been, in all, forty-nine cases of illness, or alleged illness. The specific poison may kill within three or four hours of the first declaration of illness. The onset is sudden, generally with vomiting. Almost immediately after a hearty meal a boy may complain of headache and lateral pain, and look felled, and be tottering on his limbs. The first temperature taken may be already 103° or 104°. A soporose tendency is generally evident. If the patient resists the first impact of the disease, in a number of cases pneumonia, either single or double, is developed; but a pure febrile state, with high ranges and irregular intermissions, may ensue. There is no diarrhœa at any time. In a few cases the febrile condition passes off, sometimes in a few hours, with deep sleep, and it may be perspiration, and the patient is well, but in all there is an increase of temperature, however short, except in a certain number, where fear, or in one or two instances malingering, affords a satisfactory explanation of the complaint. The drains of the institution were overhauled about two years ago, and no signs of any derangement have been observed since, but the sanitary inspector is making a thorough revision of their present condition. Dr. Russell, however, reminded the local authority of their repeated experiences of this institution, which seemed to him to call for an urgent representation in the proper quarter of its entire unsuitableness for the purposes of an industrial school. March 16th: At this date there has been a clear interval of forty-eight hours without fresh illness. Since the date of report five cases have been removed to Belvidere. Two of these were girls employed in the kitchen, which suggests an element of contagion. The application of the smoke test disclosed some defects in the soil pipes within the house. In the washing-house there was a serious escape, and in the lavatory there were six choked bell-traps, and the drains are apparently defective, but must be exposed to determine. March 18th: Five more cases of illness have occurred: none reported since.

PIT-BURIAL NEAR TWO LARGE REFORMATORIES.

The outbreak noticed above has directed public attention to two other Catholic reformatories at Dalbeth, in the immediate vicinity of Glasgow. These reformatories contain some hundreds of persons drawn largely from the criminal and lower classes, poor in physique, and many of them scrofulous. Between these two institutions, "sandwiched" between them as it were, is Dalbeth Cemetery, the exclusive property of the Roman Catholics, and used for persons in all ranks of life. As the greater part of the Roman Catholic population of Glasgow belongs to the poorer classes, a considerable part of the ground is set apart for their interment, and here the repulsive and objectionable practice of pit-burial is daily carried on, the coffins being laid in tiers in a deep trench to within a few inches of the surface, and then covered with a thin layer of earth. This practice is fraught with danger in such a neighbourhood. Further, this cemetery is near Belvidere Fever Hospital, the fever hospital for Glasgow; it is undesirable to have a nuisance of this kind at all near to large inhabited buildings. The existence of the nuisance is undoubted, and the exhalations which rise from the ground are of the most offensive kind. In certain directions of the wind the stench is said to be sickening, and passers-by are known to have had violent fits of vomiting. Unfortunately, Dalbeth is beyond the city boundaries, and the local authority, the Barony Parochial Board, is inaccessible and ineffectual as a sanitary agency, and has its hands full enough in looking after the immediate wants of an immense and very poor population. The medical officers of the two reformatories have long been cognisant of the nuisance, and have made representations in what they believed to be the proper quarters, but without success.

DUBLIN.

(From our own Correspondent.)

THE MEDICAL COMMISSIONERSHIP OF THE LOCAL GOVERNMENT BOARD.

AT last it has been authoritatively announced that Dr. F. Xavier McCabe has succeeded the late Dr. Croker King as Medical Commissioner to the Local Government Board for Ireland. Consequently he vacates the posts of Medical Adviser to the General Prisons Board, and Inspector of Reformatory and Industrial Schools, which have been conferred upon Dr. Plunkett O'Farrell, Medical Inspector for the Cork district. The inspectorship of Reformatory and Industrial Schools will, it is understood, only be held temporarily by Dr. O'Farrell. Dr. O'Farrell's promotion leaves vacant a medical inspectorship, for which there are many applicants.

PRESENTATION OF THE KHEDIVE BRONZE STAR TO THE MEDICAL STAFF CORPS.

The Medical Staff Corps located at the Military Hospital in Arbour Hill, Dublin, were paraded last week under the command of Surgeon-Major White. The following non-commissioned officers and men were presented with the Egyptian Star: Sergeant Morrison, Corporal Connor, and Privates Mortimer and Panter. These men served with Sir Gerald Grahame's expedition in the Soudan in 1885.

MATER MISERICORDIÆ HOSPITAL.

The new wing which has now been erected may be said to have completed the hospital. It measures 328 ft. in length, and is placed at right angles to the front, and consists of three portions—viz., hospital, chapel, and convent. Eight new wards for special cases have been erected, with pantries, while the closets and bath-rooms are admirably constructed. This addition will accommodate about fifty extra beds.

DR. MAGNER AND THE LOCAL GOVERNMENT BOARD.

Dr. Magner having been removed by sealed order of the Local Government Board as medical officer of

Courcey's dispensary district, the Cork Medical Protection Association recently passed a resolution requesting the Board to reconsider their decision, but, as might have been expected, without effect. As is well known, Dr. Magner was sentenced to two months' imprisonment under the Crimes Act, but appealed against the sentence, which, however, the county-court judge affirmed. The judge offered to remit the sentence if Dr. Magner would give an undertaking to take no part in criminal organisations for the future, which he declined to do, and was sent to prison, and removed from being medical officer of Courcey's dispensary. His dismissal having taken place by sealed order renders his punishment a very serious one, inasmuch as he is precluded from again holding office under the Medical Charities Act.

STEWART INSTITUTION FOR IMBECILE CHILDREN.

It appears from the annual meeting held last week that the subscriptions during the past year amounted to £1035, being a slight decrease as contrasted with the year preceding. Dr. Kidd pointed out that there were over 8000 imbeciles in Ireland, and he was anxious, he said, to have at least one-eighth of that number under their care, while as a matter of fact they had only seventy. He trusted that the institution would soon be able to accommodate a much larger number of children. The Stewart Institution is doing a good work in ameliorating the condition of a portion of the community who are greatly to be pitied.

ALLEGED OUTBREAK OF SCARLATINA AND MEASLES IN QUEENSTOWN.

The statement made some time since to the effect that these diseases prevailed to an alarming extent, and that the deaths were excessive, has been proved to be erroneous. There has not been a single case of scarlatina, and the measles prevailing is purely infantile.

March 20th.

BELFAST.

(From our own Correspondent.)

THE LATE DR. MEENAN.

AN oil portrait of the late Dr. John Meenan was recently unveiled in the presence of a large number of friends in the reception room of the Mater Infirmorum Hospital. Dr. Meenan died in July last, and it was soon afterwards resolved to place his portrait on the walls of an institution with which he was intimately associated. The picture, placed in a massive gold frame, is a very good likeness of the late doctor. Dr. Dempsey, Mr. John Fagan, and several others, who were present at the interesting ceremony, spoke in terms of the highest praise and admiration of the late Dr. Meenan.

ULSTER HOSPITAL FOR WOMEN AND CHILDREN.

From the medical report read at the annual meeting of the supporters of this charity, held on March 6th, I learn that over 3000 cases were treated in the extern department for children, and 138 patients were admitted to the wards. There has been a marked increase in the attendance of patients in the gynæcological department; 285 midwifery cases have been attended at their own homes. There have been two cases of ovariotomy, both successful. Owing to an outbreak of measles in the hospital the wards were practically closed for weeks; and this interfered with the number of intern patients treated during the year. Dr. Calwell has been appointed surgeon in place of Dr. Wheeler, who resigned his position.

THE WATER SUPPLY OF BELFAST.

Professor Hodges, M.D., the Borough Analyst, has sent in his report in reference to the samples of town water forwarded to him by the sub-committee appointed by the Town Council to investigate the question of the pollution of the water. In all the six specimens sent to him except one, Dr. Hodges found a marked increase in the amount of solid matters, both mineral and organic; but these are chiefly in suspension, and are rapidly deposited on the water being allowed to remain at rest, and he thinks the organic matter (from his examination) in all but one specimen is of a vegetable origin. However, in one specimen the excess of albuminoid ammonia renders this water of suspicious character. Dr. Hodges thinks it advisable, in considering the sources of a water supply of a town, to take into account the surroundings; and from a description of the locality from which some of the water examined was taken, and the large increase in the amount of solids, the attention of the sanitary authorities should be directed to prevent their entrance into the reservoirs. He thinks also periodical examinations of the water should be made. The recent rain and snow has increased the supply in the reservoirs to such an extent that the danger of an actual water famine during the summer is not now apprehended.

March 20th.

INDIA.

(From a Correspondent.)

TYPHOID FEVER IN CALCUTTA.

A CASE of typhoid fever which occurred in Calcutta recently, and which proved fatal, was the subject of judicial inquiry by the Presidency magistrate on the 22nd and 23rd of last month. Dr. Simpson, medical officer of health (formerly of Aberdeen), gave evidence. He stated that he visited the premises where this death occurred. His opinion differed from that of another medical witness regarding the probability of the fever being caused by any action of a servant, who was accused of pouring filth down the escape water pipe. He described the faulty drainage of the house; foul gases, he said, could enter the rooms by two pipes. The latrine was in a foul condition, and a pipe connected indirectly with the sewer was choked up. He went on to say that within the last year there have come to his knowledge a number of cases of typhoid fever. All these he investigated, and was satisfied that the fever was in each case due to faulty drainage. The sewers, again, he had had opened had no flushing arrangements. He thinks the municipality should appoint competent house-drainage inspectors to keep a strict supervision over the contractor's work, and to make a systematic house-to-house inspection. He recommended in the beginning of the year that a staff of sanitary inspectors should be appointed, but his recommendation was not adopted. The magistrate discharged the accused servant, holding that the insanitary condition of the premises was due to other causes.

THE SERVICES.

Mr. H. P. Dimmock, Civil Surgeon of Shikarpore, is appointed to act for Mr. R. Manser, as third physician to the Jamsetjee Hospital in Bombay, during the absence of the latter on leave. Mr. K. R. Kirtikar, Civil Surgeon of Tana, is appointed to act as Principal Medical Storekeeper in Bombay, vice Mr. W. Dymock, who has been obliged to go on leave on account of ill health. Dr. P. S. Turnbull, Secretary to the Military Surgeon-General in Bombay, has been appointed to be Deputy Surgeon-General at Kurrachee, vice Dr. J. Pinkerton, promoted to Civil Surgeon-General. The annual report on civil hospitals and dispensaries in the Madras Presidency for 1886, and the annual report for the year ending Dec. 31st, 1886, on lunatic asylums in the Madras Presidency have just been issued. These reports are from the pen of Mr. G. Biddie, M.B., C.I.E., Surgeon-General with the Madras Government.

THE BOMBAY UNIVERSITY.

The *Bombay Gazette* says that the medical faculty of this University have decided to recommend the Senate to abolish the licence in Medicine and Surgery and to substitute the bachelors' degree; the previous examination, instead of the matriculation only, being made a necessary qualification in arts.

SURGEON-GENERAL W. J. MOORE, C.I.E.

Surgeon-General Moore, who, after thirty-six years' service, retired recently, leaves India for good by to-day's mail steamer for England. In the early part of his career he served with the Rajpootana field force. He then served with the old Indian navy, in which all young medical officers were for the most part in those days required to serve. He served with the Indian navy in the Persian expeditionary force, for which he received a medal and a clasp. Later on he held the appointment of Superintendent-General of dispensaries in Rajpootana, until his promotion to Deputy Surgeon-General at Bombay, which office he filled for the full term of five years, after which he was permitted to

reside in England as an unemployed Deputy Surgeon-General until his appointment as Surgeon-General in April, 1885.

BOMBAY LEPERS.

A correspondent, in an able and vigorous letter in the *Times of India*, draws public attention to the fact that lepers are huddled together, with other unfortunate creatures, in Byculla, the very heart of Bombay. In this connexion allusion may simply be made to the opinion arrived at by Dr. Vandyke Carter, that segregation is the only safe hygienic measure for stamping out the disease, and brilliant esults, he has shown, are obtained in Norway. It is to be hoped that something will be done to establish suitable asylums for the segregation of lepers.

March 2nd.

THE SERVICES.

Surgeon-Major T. Babington has been appointed Registrar of the Royal Victoria Hospital, Netley, and Officer Commanding the 2nd Division of the Medical Staff Corps in succession to Surgeon-Major T. Faris, who has been appointed Staff Officer at Headquarters.

WAR OFFICE.—The undermentioned officer, having applied before January 1st, 1888, to retire from the Service, has been granted a step of honorary rank from the date of his retirement: Surgeon-Major D. C. W. Heather, Medical Staff, to be Brigade Surgeon (dated Jan. 25th, 1888).

YEOMANRY CAVALRY.—Royal North Devon (Hussars): Surgeon C. H. Gamble resigns his commission; also is granted the honorary rank of Surgeon-Major, and is permitted to continue to wear the uniform of the Regiment on his retirement (dated March 17th, 1888).

RIFLE VOLUNTEERS.—2nd Volunteer Battalion, the Royal Scots Fusiliers: James Moir, Gent., to be Acting Surgeon (dated March 17th, 1888).—2nd (Glamorgan) Volunteer Battalion, the Welsh Regiment: Acting Surgeon J. H. Davies to be Surgeon (dated March 17th, 1888).—19th Lancashire (Liverpool Press Guard): Surgeon R. Robertson, M.D., resigns his commission (dated March 17th, 1888).—Acting Surgeon F. G. Tooker, M.D., resigns his appointment (dated March 17th, 1888).—2nd Volunteer Battalion, the Norfolk Regiment: Acting Surgeon D. C. Smith resigns his appointment (dated March 17th, 1888).—3rd Volunteer Battalion, the East Surrey Regiment: John Ebenezer Lane, M.D., to be Acting Surgeon (dated March 17th, 1888).

Medical News.

COLLEGE OF PHYSICIANS IN IRELAND.—At examinations held during January and February the following obtained Licences in Medicine and Midwifery:—

MEDICINE.—William Boake, Jas. J. Hayes Jackman, and W. McDowel Wright.

MIDWIFERY.—William Boake, Robert Bryans, James Graham Hojel, T. Hopkins, J. Hayes Jackman, and J. J. Orr.

The undernamed have been admitted Members:—

Joseph Beatty, Michael Austin Boyd, James Peter Byrne, and John Stuart Ireland.

ST THOMAS'S HOSPITAL.—On Thursday last H.R.H. the Princess of Wales, accompanied by the Princesses Victoria and Maud, Prince George of Wales, and the Crown Prince and Princess of Denmark, paid a visit to St. Thomas's Hospital. The Royal party spent nearly two hours in the wards, and expressed the greatest sympathy for the patients and interest in their sufferings. They were received by the resident assistant-physician, Dr. Mackenzie; the resident assistant-surgeon, Mr. Battle; Mr. Plowman; the Rev. J. Grant Mills; the steward of the hospital, Mr. Walker; and Miss Buchanan, the assistant matron. As chiefly surgical wards were visited, the resident assistant surgeon was frequently called upon to explain the nature of particular cases. Amongst those attracting special attention were the following: one in which tracheotomy had been performed for malignant disease of the throat, a Soudanese boy under treatment for genu valgum, a Dane suffering from caries of the metatarsus, and several children in Victoria ward, especially a child with hare-lip. The Home for paying patients was visited, also the Nightingale Home, and the Ophthalmic Ward. The Royal party expressed themselves greatly pleased with what they had seen.

HOSPITAL SUNDAY COLLECTIONS, WARRINGTON.—The collections and donations received in aid of the Warrington Infirmary and Dispensary, as shown by the return just made, amounted to £114 7*s.* 8*d.*

SOUTHPORT INFIRMARY.—The treasurer has recently received £51 13*s.* 6*d.*, the result of the concert lately given by the Southport Medical Eclogue Society, which, with a previous contribution of £62, handed over within about twelve months, makes a total of £113 13*s.* 6*d.*

UNIVERSITY COLLEGE HOSPITAL.—The concert recently held at the Stanley Hall, Holloway, organised by the *employés* of the Midland Railway, Kentish-town, in aid of the funds of this hospital, has resulted in a handsome donation of £57 to that charity.

SCARLET FEVER is stated to have broken out on board the training-ships *Shaftesbury* and *Exmouth*, lying off Grays. Sixteen cases had been reported from the former and one from the latter. The port sanitary authorities have the ships under strict surveillance, and every precaution is being taken.

HOSPITAL FOR INFECTIOUS DISEASES, STOCKPORT.—The Board of Guardians has resolved to memorialise the Government to insert in the Local Government Bill a clause charging upon the county authority the duty of providing accommodation for infectious diseases, the cost to be paid out of the county rate.

UNIVERSITY OF OXFORD.—Notice has been issued to candidates for the second examination for the degree of Bachelor of Medicine, who offer all the subjects of that examination together, and who passed the first examination for the said degree under the statutes in force before 1886, that the examination in Materia Medica and Pharmacy will in their case be conducted as it was under the provisions of the old statute.

YORK COUNTY HOSPITAL.—At the annual court of governors of this institution, held a few days ago, it was stated that the available income was inadequate to meet the requirements, which is attributed to the very considerable increase of patients, coupled with the decrease of subscriptions, collections, and donations. Financially, the year began with a balance in the treasurer's hands of £405, but on Dec. 31st there was due to him £367.

PARKES MUSEUM.—At a meeting recently held, Sir Douglas Galton, K.C.B., in the chair, a lecture was given by Miss Chreiman on Physical Culture, illustrated by a few of her girl pupils, who went through a performance of ball, dumb-bell, and free exercises. The Court of Common Council have just made a donation of 25 guineas to this museum, to aid in its work of practical teaching and demonstrating sanitary science.

LIABILITY FOR MEDICAL CHARGES.—Mr. Alfred Bourne, of Osmotherley, lately sued Mr. William Fawcett, of East Harsley, for £10 10*s.* for attendance on his niece. The defendant declined to pay, as he had not given orders for the doctor to be sent for. The judge said he could not but believe that defendant had given his authority for the doctor to be sent for, and everyone who sent for a doctor, whether for a son or a visitor at his house, was bound to pay him. He therefore gave a verdict for £10 12*s.* 6*d.*

UNIVERSITY OF CAMBRIDGE.—The following preliminary notice with respect to the examinations for Medical and Surgical Degrees (Easter term, 1888) has been issued. The examinations will begin on the following days respectively:—First and Second M.B. Examinations, Tuesday, June 5th. Third M.B. Examination, Part 1, Tuesday, May 8th; Part 2, Wednesday, May 9th. B.C. and M.C. Examinations, Friday, May 11th. The names of candidates for the Third Examination and for the Examinations in Surgery must be sent to the Registrary (through the Prælectors of their respective Colleges) on or before Thursday, April 26th: those for the First or Second Examination on or before Monday, May 21st. The certificates of candidates, accompanied by their postal addresses, should be sent to the Registrary not less than five clear days before the beginning of the examination for which they are entered. The fees for the examination must be paid to the Registrary when the certificates are sent in. Candidates whose names and certificates have not been sent in and fees paid at the proper time are liable to an additional fee of £1 if they are admitted to the examination.

THE Ashton-under-Lyne corporation have just completed the erection of their new hospital for infectious diseases, at a cost of £2000—just double the expected outlay.

CENTENARIAN.—The death was announced on the 17th inst., at North Somercotes, Lincolnshire, of Susannah Michael. She had attained the age of 100 years.

AT the recent annual meeting of the governors and supporters of the Warneford Hospital, Leamington, the Right Hon. A. W. Peel, Speaker of the House of Commons, was appointed president of the institution.

THE committee of the Hastings, St. Leonards, and East Sussex Hospital have accepted the conditions attached to the recent offer of £1000 for the endowment of a bed in that institution to perpetuate the memory of the late Mr. Frederic Ticehurst, who was for thirty-six years—from 1841 to 1877—surgeon to the hospital.

SEWAGE UTILISATION WORKS AT BATLEY.—The Batley corporation are now fairly launched on their sewage utilisation scheme, for which they obtained borrowing powers so long ago as 1875. The sewage is to be dealt with on the precipitation principle, and several tenders have already been accepted. The original estimate for the works was £10,000, exclusive of the land, but it is now expected that they will be carried out for a little more than half this sum.

GUY'S HOSPITAL.—We understand that the general court of the governors of Guy's Hospital has sanctioned the erection of a residential medical college upon a site immediately contiguous to the hospital. It is proposed that the sum required for this purpose, estimated at £20,000, should be raised by private subscription among the governors, the medical staff, the lecturers and teachers in the medical school of Guy's Hospital, and their friends. The Special Appeal Fund lately raised, and which is only available for purely hospital purposes, now amounts to £85,000.

MEDICO-PSYCHOLOGICAL ASSOCIATION.—The quarterly meeting of the Scottish branch of this Association was held in the hall of the Faculty of Physicians and Surgeons of Glasgow on the 8th inst. Dr. Watson was called to the chair. Dr. Yellowlees narrated his experiences in visiting a number of American asylums. Various other members that had been in America joined in the subsequent discussion. Dr. Turnbull then read notes of a case of Exophthalmic Goitre with Insanity. Dr. Ireland read a paper giving an account of a recent visit to the Institution for Idiots at Bergen. Drs. Clouston, Howden, Urquhart, and Yellowlees were appointed a committee to make arrangements for the annual meeting of the Association in August next, which this year is to be held in Edinburgh.

THE SEWAGE FARM AT STRATFORD-ON-AVON.—At the Warwick Assizes last week, Mr. William Thompson, an architect and town councillor of Stratford-on-Avon, obtained £1000 damages from the corporation of that town in an action for a nuisance caused by the defendants' sewage farm, which is in close proximity to his house and dwelling. It appeared that the plaintiff in 1871 purchased land and erected a dwelling-house near Stratford. In 1881 the corporation proposed to make a sewage farm near his land, which the plaintiff unsuccessfully opposed. The sewage farm was made. The system adopted was that of pumping the sewage straight on to the land, and after a time the ground became clogged, and very bad smells came from the farm. The plaintiff complained to the corporation of the nuisance. Subsequently steps were taken to diminish the smells, but which proved ineffectual to abate the nuisance. The corporation now admitted that a nuisance had existed. The judge also granted an injunction against the defendants, to be suspended for twelve months, to allow the corporation time to put into operation a remedial process.

ST. MARY'S HOSPITAL, MANCHESTER.—The report for the year 1887 showed that the income derived from subscriptions and investments was below the amount required to defray current expenses, notwithstanding there was an increasing demand upon the resources of the charity. A comparison of the year's income with the expenditure showed the following results—viz., income from subscriptions £1129 19*s.* 9*d.*, and from investments £1361, added to which collections, donations, &c., received raised the total income to £3430 5*s.* 6*d.*, against a total expenditure of £3648 13*s.* 3*d.* Regret was expressed at the loss the institution was about to sustain by the removal of Dr. Cullingworth as a physician on the medical staff. The necessity for a reconstruction and enlargement of the hospital, long contemplated and referred to in the report of last year, having been determined upon, a canvas for subscriptions towards the new building had resulted in obtaining up to the present time £20,000, or two-thirds the amount required to carry out the original plan. The board looked forward to the commencement of the new building at no distant time.

WOLVERHAMPTON AND STAFFORDSHIRE GENERAL HOSPITAL.—The annual meeting of the governors was held on Tuesday, March 13th, 1888, and the Weekly Board, in submitting the thirty-ninth annual report, state that the number of in-patients treated during the past year has been 1906, against 1956 in the preceding year; 1253 of whom, as accidents or urgent cases, were admitted without tickets, the results being as follows: discharged cured or relieved, 1596; incurable, or at own request, 71; died, 139; remaining in the hospital at the end of the year, 100; total, 1906. Among the in-patients are included 101 cases of fever, erysipelas, measles, and diphtheria, treated in the fever block; 49 cases in the wards for the treatment of diseases peculiar to women; and 398 children under ten years of age, in the children's department. The weekly attendance of out-patients during the past year has averaged 599, or 31159 visits during the year. The cost per head of each in-patient has been £2 16*s.* 2¾*d.*, the cost per bed occupied £45 8*s.* 4*d.*, and the average stay in the hospital 21 days. The number of patients sent to various convalescent homes has been 80. The bequests and the donations received during the year amounted to £1814 7*s.*

THE LONDON DENTAL HOSPITAL.—A new wing of the hospital was opened on the 15th, after the annual general meeting. Since 1874, when the hospital was removed to Leicester-square, the number of patients treated has rapidly increased, and has at length forced the managing committee to set about enlarging their premises. Tending in the same direction has been the considerable numerical increase of the dental students receiving instruction at the school. The building, as at present enlarged, has cost a considerable sum, and over £5700 deficit exists, and this in spite of the staff themselves having given £1000. The enlargement embraces some great improvements, amongst which may be noted a very fine filling room, a lecture theatre, waiting rooms, a room for operations under anæsthetics, and lavatories for students. The authorities of the hospital have announced a Post-graduate Course of Demonstrations for Registered Doctors and Dentists. We understand that it is intended to make the course of a very practical character. Two demonstrations are to be given each day, and include such subjects as gold fillings of various kinds—amalgam, and other soft stoppings; treatment of fractured maxillæ, of pyorrhœa-alveolaris, alveolar abscess, &c.; all of which subjects are as interesting to the general as to the dental practitioner.

MEDICAL NOTES IN PARLIAMENT.

Lunacy Acts Amendment Bill.

In the House of Lords, on the 20th inst., the report of amendments to this Bill was received.

Coroners.

A Bill has been introduced by Lord Halsbury to remove the appointment of coroners from the freeholders in counties and the council in boroughs, and vest it in the Lord Chancellor. Another provision extends the jurisdiction of coroners to cases of fire. However, an inquiry as to a fire would only be held at the request of the Metropolitan Board within its area, or of the borough council in a borough, or of a county magistrate elsewhere. Provision is also made for the revision of the remuneration given to coroners; and power is given to the Queen to fix by Order in Council the area of a coroner's jurisdiction in a county.

The Ashford Vaccination Case.

In the House of Commons on the 15th inst., replying to Mr. Bradlaugh, the President of the Local Government Board said he was informed by the guardians that, in respect to one of his children, Charles Hayward had on eighteen occasions had orders made on him by the justices requiring him to cause his child to be vaccinated, and was as many times convicted for not complying. In respect to another child, Hayward was convicted once for not having the child vaccinated after three months. Further, on eight occasions orders of justices had been made on Hayward for the vaccination of his child, and he had been convicted the same number of times. He had therefore been convicted in all twenty-seven times.—Mr. Bradlaugh asked if they were to understand that there had been only twenty-seven prosecutions.—Mr. Ritchie: Twenty-seven convictions.

Local Government Bill.

In the House of Commons on the 19th inst., Mr. Ritchie, pursuant to notice, moved for leave to bring in two Bills to amend the laws relating to Local Government in England and Wales (the first being a Registration Bill). Plunging at once into the details of the Bill, and premising that the judicial functions of county magistrates would not be disturbed, he explained first the duties which are to be cast on the new county councils, such as the levying of county rates, maintenance of county roads and bridges, lunatic asylums, industrial and reformatory schools, registration, weights and measures, adulteration of food and drugs, &c. The county council would have a concurrent authority with the existing sanitary authorities to enforce the provisions of the Rivers Pollution Act; and the powers of the Local Government Board with regard to provisional orders under the Acts of Parliament relating to piers and harbours, electric lighting, gas and water, tramways, &c., and the power to sanction market tolls, settle disputes as to boundaries, and the administration of the Sale of Food and Drugs Acts &c., would be transferred to the county council. The council would also have power to enlarge the incidence of the contribution towards the cost of maintaining in-door paupers and to promote emigration by making advances to emigrants; the county to take the place of local boards and rural and urban sanitary districts, the boundaries of which will be settled by the county council. The electors of the district councils would be the same as the county councils; in fact, the electors for town councils in boroughs, the county councils, and the district councils would be identical. but there would be no alteration as to the areas of Poor-law unions or in the election of guardians. As to the metropolis, London, as defined under the Metropolis Management Act, would be taken out of the counties of Middlesex, Surrey, and Kent, and made a county by itself, with a separate Lord Lieutenant and a separate Commission of the Peace. The council for London would be elected as in the counties and take over the same duties, and the Metropolitan Board of Works would cease to exist.

Mr. Ritchie then explained the provisions of the Bill with regard to the licensing question, and concluded a speech of two hours and a quarter by claiming for his Bill that it dealt with the question in a broad and comprehensive spirit, and that it was founded on trust in the people. Numerous questions on matters of detail were put to Mr. Ritchie, to which he replied, and leave having been given to introduce the Bills they were read a first time, the second reading being fixed for April 12th.

Acrobatic Performances.

On Thursday, in answer to Mr. Howard Vincent, Mr. Matthews stated that the Children's Dangerous Performances Act, 1879, did not give power or impose the duty of taking action as to the public exhibitions of young children in acrobatic and other performances apparently dangerous to the life and limbs of children now taking place in the metropolis upon the Metropolitan Police, or the Metropolitan Board of Works, or other public authority, but left it open to any person or society to initiate a prosecution. He understood that there was a society that occasionally took proceedings under the Act.

Appointments.

Successful applicants for Vacancies, Secretaries of Public Institutions, and others possessing information suitable for this column are invited to forward it to THE LANCET *Office, directed to the Sub-Editor, not later than 9 o'clock on the Thursday morning of each week for publication in the next number.*

BADCOCK, ARTHUR, M.R.C.S., has been appointed House Surgeon to the York Dispensary.

CANDLER, WILLIAM H., M.R.C.S., L.R.C.P., has been appointed House Surgeon to the York Dispensary.

FRASER, DAVID, M.B., C.M.Ed., has been appointed Medical Officer for the Collieries of Cardenden, Denend, and Dundonald, Fife.

GROWSE, WILLIAM, B.A.Oxon., L.R.C.P. Lond., M.R.C.S., has been appointed Medical Officer for the Marton District of the Rugby Union.

HARTIGAN, WILLIAM, M.K.Q.C.P. & S. Irel., has been appointed Visiting Medical Officer to the Alice Memorial Hospital, Hong Kong.

HAYNES, E. L., M.R.C.S., L.S.A., has been appointed House Surgeon to the York Dispensary.

HOSKGOOD, S. P., M.R.C.S., L.R.C.P. Lond., has been appointed Resident Clinical Assistant to the St. Marylebone Infirmary, Notting-hill, W., vice W. P. Peake, resigned.

JORDAN, GREGORY P., M.B., C.M.Ed., M.R.C.S., has been appointed Ophthalmic Surgeon and Honorary Medical Secretary to the Alice Memorial Hospital, Hong Kong.

LIESCHING, CHARLES E., M.R.C.S., L.R.C.P.Lond., has been appointed Surgeon to the Tiverton Infirmary and Dispensary.

MACKEITH, ALEXANDER ARTHUR, M.B., C.M.Glas., has been appointed Medical Officer and Public Vaccinator for the Brampford Speke and Upton Pyne Districts of the St. Thomas Union, vice M. L. Brown, M.D., C.M., resigned.

MANSON, PATRICK, M.D.Aber., LL.D., has been appointed Visiting Medical Officer to the Alice Memorial Hospital, Hong Kong.

MILLIGAN, WILLIAM, M.B., C.M. Aber., has been appointed Junior House Surgeon to the Northern Hospital, Liverpool.

OPENSHAW, T. HORROCKS, M.B., M.S., F.R.C.S., has been appointed Curator of the Pathological Museum in the London Hospital Medical College, vice F. Charlewood Turner, M.D., F.R.C.P., resigned.

OWEN, RICHARD JEFFREYS, L.R.C.P.Lond., M.R.C.S., has been re-appointed Medical Officer for the Second District of the Llandovery Union.

PEAKE, W. P., M.R.C.S., L.R.C.P.Lond., has been appointed Assistant Medical Officer to the St. Marylebone Infirmary, Notting-hill, W.

YOUNG, WILLIAM, M.D., has been appointed Visiting Medical Officer to the Alice Memorial Hospital, Hong Kong.

Vacancies.

In compliance with the desire of numerous subscribers, it has been decided to resume the publication under this head of brief particulars of the various Vacancies which are announced in our advertising columns. For further information regarding each vacancy reference should be made to the advertisement.

ALNWICK INFIRMARY.—House Surgeon. Salary £120 per annum, with furnished apartments, attendance, coal, and gas, but without board.

BETHNALL HOUSE ASYLUM, Cambridge-road, E.—Junior Medical Officer. Salary £100 per annum, with board and washing.

BRISTOL CITY LUNATIC ASYLUM. — Second Assistant Medical Officer. Salary £150 per annum, with furnished apartments, board (except beer, &c.,) and washing.

CHARING-CROSS HOSPITAL.—Assistant Surgeon.—Surgical Registrar.

CORPORATION OF DERBY BOROUGH ASYLUM.—Medical Superintendent. Salary £350, with furnished house, gas, water, coal, vegetables, and washing.

HULL BOROUGH ASYLUM, Willerby, near Hull. — Assistant Medical Officer. Salary £100 per annum, with board, lodging, and washing.

LIVERPOOL INFIRMARY FOR CHILDREN, Myrtle-street.—House Surgeon. Salary £85 per annum, with board and lodging.

LOUGHBOROUGH FRIENDLY SOCIETIES' MEDICAL AID ASSOCIATION.—Assistant Medical Officer. Salary to commence at £120 per annum, out-door.

METROPOLITAN ASYLUMS BOARD.—Clinical Assistant at the Small-pox Hospital Ships lying in the Thames near Dartford. Remuneration consists of board, furnished apartments, and washing.

NORTHAMPTON GENERAL INFIRMARY.—House Surgeon. Salary £125 per annum, with furnished apartments, board, attendance, and washing.

RICHMOND HOSPITAL.—House Surgeon. Salary £80 for first year, with an annual increase of £10 up to £100, with board and furnished apartments.

SOUTH EASTERN DISPENSARY, Bermondsey.—Resident Surgeon. Salary £40, with share of Provident Fund.

Births, Marriages, and Deaths.

BIRTHS.

DAVIES.—On the 5th inst., at Maisonette, Woolston, Southampton, the wife of Surgeon Arthur Mercer Davies, Assistant Professor of Hygiene, Army Medical School, of a son.

DE LA COUR.—On the 18th inst., at Camden-road, N.W., the wife of G. F. De la Cour, M.D., of a daughter.

FINDLATER.—On the 19th inst., at Aldborough, Norwich, the wife of Alex. Findlater, M.D., of a daughter.

HEWER.—On the 16th inst., at 29, Brownswood Park, N., the wife of J. Langton Hewer, M.D., B.S., F.R.C.S., of a daughter.

NICHOLS.—On the 19th ult., at Umballa, Bengal, the wife of Surgeon F. P. Nichols, B.A., M.B., Medical Staff, of a daughter.

PENNY.—On the 10th inst., the wife of E. J. Penny, M.R.C.S., L.S.A., of Great Berkhamsted, of a daughter.

SMITH.—On the 17th inst., at Cedar Lawn, Burbage, near Hinckley, the wife of Robert Bradshaw Smith, L.R.C.P.Ed., L.R.C.S.I., of a son.

MARRIAGES.

BENSON—BROWN.—On the 14th inst., at Holy Trinity, Barkingside, Henry T. Benson, L.R.C.P.Lond., L.S.A., to Alice Maude, fourth daughter of Geo. Brown, Esq., of East Wickham, Kent, and Gaysham Hall, Essex.

BIDEN—LAYLAND.—On the 20th inst., at St. John's Church, Lewisham High-road, Edward James Biden, Surgeon, R.N., to Alice Chambers, youngest daughter of the late Henry James Layland, R.N., of Brockley, S.E.

HAMILTON—THOMSON.—On the 13th inst., at Holy Trinity Church, Shaw, Alexander Hamilton, F.R.C.S.E., to Beatrice Emily Sarah, daughter of the late Alex. Thom Thomson, F.R.C.S., J.P., of Montrose House, Oldham.

PARFITT—ANGUS.—On the 14th inst., at Holy Trinity, Brompton, S.W., Edward Browne Parfitt, L.R.C.P., to Alice Maud, daughter of the late Jos. W. Angus, of Elswick, Newcastle-upon-Tyne.

SOMERVILLE—MAY.—On the 14th inst., at St. James's Church, Higher Sutton, by the Venerable Archdeacon Gore, M.A., assisted by the Rev. E. Smith, M.A., Vicar, John Somerville, F.R.C.S.E., to Geraldine, youngest daughter of John May, J.P., of Ridge Hill.

DEATHS.

FOX.—On the 14th inst., at Weston-super-Mare, Louis Windham Fox, L.R.C.P., L.R.C.S.Ed., in his 35th year.

HUME.—On the 16th inst., at Gladstone House, Southsea, Thomas David Hume, M.D., Inspector-General of Army Hospitals (retired), in the 80th year of his age.

PAXON.—On the 20th inst., at Dorking, after a short illness, George Kirkham Paxon, M.R.C.S., L.S.A., aged 75.

PETERKIN.—On the 18th inst., at The Grange, Kew, James Peterkin, M.D., F.R.C.S., late Surgeon-Major, Madras Army, aged 70.

PRICHARD.—On the 12th inst., at Bryntirion, Bridgend, Glamorgan, Wm. Prichard, J.P., M.R.C.S., aged 72.

N.B.—*A fee of 5s. is charged for the Insertion of Notices of Births, Marriages, and Deaths.*

Medical Diary for the ensuing Week.

Monday, March 26.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10.30 A.M., and each day at the same hour.

ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1.30 P.M. and each day at the same hour.

CHELSEA HOSPITAL FOR WOMEN.—Operations, 2.30 P.M.; Thursday, 2.30.

ST. MARK'S HOSPITAL.—Operations, 2 P.M.; Tuesday, 2.30 P.M.

HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M., and on Thursday at the same hour.

METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.

ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.

CENTRAL LONDON OPHTHALMIC HOSPITALS.—Operations, 2 P.M., and each day in the week at the same hour.

SOCIETY OF ARTS.—8 P.M. Prof. W. Chandler Roberts-Austen: Alloys. (Cantor Lecture.)

MEDICAL SOCIETY OF LONDON.—8.30 P.M. Clinical Evening. Dr. Orwin: A case of Lupus of the Mouth, Pharynx, and Larynx.—Mr. Edmund Owen: A case of Injury to the Lower Epiphysis of the Ulna.—Mr. William Rose: A case of Gunshot Injury of the Knee-joint.—Mr. Davies-Colley: A case of Trephining for Middle Meningeal Hæmorrhage.—Mr. Beevor: A case of Charcot's Disease of Shoulder Joint.—Mr. Walter Pye: A case of Obliterated Arteritis from Crutch Pressure.—Dr. Purcell: Two cases of Theirsch-Gould's Operation for Removal of Penis. Also cases by Mr. John Morgan and others.

Tuesday, March 27.

GUY'S HOSPITAL.—Operations, 1.30 P.M. and on Friday at the same hour. Ophthalmic Operations on Monday at 1.30 and Thursday at 2 P.M.

ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 4 P.M.; Friday, 2 P.M.

CANCER HOSPITAL, BROMPTON.—Operations, 2.30 P.M.; Saturday, 2.30 P.M.

WESTMINSTER HOSPITAL.—Operations, 2 P.M.

WEST LONDON HOSPITAL.—Operations, 2.30 P.M.

ST. MARY'S HOSPITAL.—Operations, 1.30 P.M. Consultations, Monday, 2.30 P.M. Skin Department, Monday and Thursday, 9.30 A.M.

WEST LONDON HOSPITAL.—5 P.M. Clinical Afternoon. Mr. Keetley: (1) Case of Transplanting Skin from Arm to Face; (2) Cases illustrating Deformities of the Toe, and their Treatment.—Mr. Edwards: Cases of Disease of Testis.—Mr. Bruce Clarke: (1) Cases of Wired Patella; (2) Severe Flatfoot treated by Excision of Part of the Tarsus.—Dr. Hetherington: Hemiplegia with Heart Disease.—Dr. Bate: Cases of Atrophic Rhinitis.

SOCIETY OF ARTS.—8 P.M. Mr. J. Stephen Jeans: The Panama Canal.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.—8.30 P.M. Mr. G. H. Makins: A case of Extroversion of the Bladder treated by Preliminary Division of the Sacro-iliac Synchondroses.—Mr. W. J. Walsham: A case of Wound of the Femoral Artery and Vein, Traumatic Varicose Aneurysm, Ligature of both Artery and Vein, Recovery; with Remarks on the Treatment of Wounds of the Femoral Artery and Vein.

Wednesday, March 28.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.

MIDDLESEX HOSPITAL.—Operations, 1 P.M.

ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour. Ophthalmic Operations, Tuesday and Thursday, 1.30 P.M. Surgical Consultations, Thursday, 1.30 P.M.

ST. THOMAS'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour.

LONDON HOSPITAL.—Operations, 2 P.M.; Thursday & Saturday, same hour.

GREAT NORTHERN CENTRAL HOSPITAL.—Operations, 2 P.M.

SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2.30 P.M.

UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.; Saturday, 2 P.M. Skin Department, 1.45 P.M.; Saturday, 9.15 A.M.

ROYAL FREE HOSPITAL.—Operations, 2 P.M., and on Saturday.

KING'S COLLEGE HOSPITAL.—Operations, 3 to 4 P.M.; Friday, 2 P.M.; Saturday, 1 P.M.

CHILDREN'S HOSPITAL, GREAT ORMOND-ST.—Operations, 9 A.M.; Saturday, same hour.

HUNTERIAN SOCIETY.—8 P.M. Dr. Ryle: A case of Tympanites treated by Puncture of the Intestine.—Mr. Corner: A Fatal Case of Acute Intestinal Obstruction complicating Utero-gestation, with Specimen.—Dr. J. Dundas Grant: Tinnitus Aurium.

BRITISH GYNÆCOLOGICAL SOCIETY.—8.30 P.M. The Adjourned Discussion on the Electrolysis of Uterine Myomata will be opened by Dr. G. Granville Bantock. Specimens will be exhibited by Mr. Lawson Tait, Dr. Mansell-Moullin, the President, and others. Council at 8 P.M.

Thursday, March 29.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M. Ophthalmic Operations, Friday, 1.30 P.M.

CHARING-CROSS HOSPITAL.—Operations, 2 P.M.

NORTH-WEST LONDON HOSPITAL.—Operations, 2.30 P.M.

Friday, March 30.

ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.

Saturday, March 31.

MIDDLESEX HOSPITAL.—Operations, 2 P.M.

METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET Office, March 22nd, 1888.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radia in Vacuo.	Max. Temp. Shade.	Min. Temp	Rain fall.	Remarks at 8.30 A.M.
Mar. 16	29·38	N.E.	36	35	...	37	35	·13	Snowing
,, 17	29·75	N.E.	32	...	53	37	30	...	Snowing
,, 18	30·02	N.E.	33	...	...	35	30	...	Overcast
,, 19	30·07	N.E.	30	...	50	36	29	...	Overcast
,, 20	29·98	N.E.	32	...	...	34	29	·14	Snowing
,, 21	30·23	N.E.	36	33	81	46	32	...	Cloudy
,, 22	30·03	W.	36	35	...	42	31	...	Overcast

Notes, Short Comments, & Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

All communications relating to the editorial business of the journal must be addressed "To the Editors."

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for insertion or for private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe or recommend practitioners.

Local papers containing reports or news-paragraphs should be marked and addressed to the Sub-Editor.

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "to the Publisher."*

We cannot undertake to return MSS. not used.

TREATMENT OF BORBORYGMI.

M.D.Cantab. asks for any suggestions as to the treatment of this condition in a case (a lady, aged sixty) in which dyspeptic symptoms exist, though the tongue is usually clean and not atonic, and the bowels are regular. The treatment pursued has been a combination of subnitrate of bismuth, glycerine, tincture of ginger and tincture of compound cardamoms, and peppermint water before meals, lactopeptine directly after meals, and terebene in twenty-minim doses occasionally.

W. S. C.—The instantaneous photography of microscopic preparations is a process on which Italian physiologists and pathologists have for some time been employed. A paper on the subject has been written by Capranica, and presented by Dr. Tommasi-Crudeli to the Accademia dei Lincei of Rome, in whose Transactions it will appear in due course.

J. C. F.—A copy of the handbill should be forwarded to the authorities of the body whose licence is thus disgraced.

CASE OF FÆCAL ACCUMULATION, WITH MAGGOTS.

To the Editors of THE LANCET.

SIRS,—Perhaps you may consider the following case of some interest.

J. R——, aged about forty, having been suffering for a week from constipation, with extreme pain and great tenderness and swelling in the region of the cæcum, also vomiting and flatulent distension, I considered it a case of obstruction with accompanying typhlitis. I prescribed belladonna, calomel, and opium, and gave copious soap-and-water injection, ordering hot applications to the part, but without much benefit. I afterwards injected warm olive oil, followed by more soap-and-water, with the result, in a few hours, of dislodging a quantity of hardened fæces, containing a great number of live white maggots.

Query—Were the maggots the result of fæcal decomposition? Or were they antecedent to it, and really the cause of obstruction by setting up inflammation? I am, Sirs, yours faithfully,

Gravesend, March 14th, 1888. DOUGLAS MACDONOGH.

PRESCRIBING BY CHEMISTS.

Mr. Hughes R. Davies directs attention to a case described in the law reports of the *Standard*, in which the plaintiff called as a witness a chemist whom she had consulted and who had prescribed for her after being assaulted. The chemist would have shown better taste in declining to prescribe, and was, in fact, superseded by a medical man.

Mr. W. Smith (Redditch) will find the subject noticed in our present issue.

QUESTION OF PROPER PROFESSIONAL WITNESSES.

WITH reference to a case reported in the North and South Shields daily newspapers, it seems very evident that Mr. Bates ought to have been the medical witness in the case. He obeyed the summons immediately, and he applied all the important measures so urgently needed in such a case with promptitude. Moreover, he was eminently in a position to testify to the nature of the poison recovered from the stomach. It is surprising that the coroner or his officer should not have ascertained the facts and summoned Mr. Bates. It is to be regretted that Mr. Robinson, as he undertook to report the case to the police, did not report Mr. Bates's important services in relation to it. On the question of treatment, it is difficult to suggest anything further or better than the measures used by Mr. Bates. Flapping with a cold-water towel is a powerful aid to galvanism after the use of the stomach-pump. And it should also be a rule in such cases never to leave the patient while life remains. Recovery does certainly take place from very extreme states. In this case, though medical service was so prompt and appropriate, there was doubtless considerable absorption of poison before Mr. Bates had time to employ the stomach-pump.

An Old Subscriber is not entitled to a fee for operation on hæmorrhoids; but frequently the guardians (on application by the medical officer) will award a gratuity in such cases, especially where extra medical aid has been called in.

J. W. W.—Syrup of gooseberries is a recognised preparation in the French Codex. The juice of gooseberries is filtered and sweetened. It is extensively used for flavouring drinks in France. It can easily be procured.

Endymion.—The paper is under consideration.

RECURRENT FEBRILE ATTACKS.

To the Editors of THE LANCET.

SIRS,—I shall be very grateful if any of your readers can furnish me with a diagnosis, and give me some hints for treatment, in the following case.

On Dec. 18th last I was sent for to see a boy of three years, whom I found suffering from tonsillitis. This ran its usual course (there was nothing diphtheritic in its character), and the child was convalescent, when on calling one morning I was astonished to find my little patient extremely ill, with temperature at 103° F., and complaining bitterly of occipital pain. There was no sign of any fresh throat mischief. The bowels were constipated, and there were nervous twitchings, but never any convulsions. This state continued for a fortnight, the patient wasting considerably, becoming very drowsy, lying with eyes half open, pupils dilated and somewhat sluggish, legs drawn up to abdomen and hands folded over genitals, abdomen markedly retracted, and every now and then uttering a shrill cry, which could be heard at some distance from the house. The pulse was usually 140, not markedly intermittent. The temperature varied from normal or subnormal to 103°. There was slight sickness during the first few days, but not latterly. Urine passed in large quantity at first, and of low specific gravity; no albumen or sugar. I felt convinced that I had a somewhat anomalous case of tubercular meningitis to deal with, especially as in the intervals of consciousness the child complained of agonising occipital pain. He flushed and turned pale very frequently. On Jan. 10th I found him free from pain, and taking great interest in all aronnd him, looking at toys, and playing feebly with them. The next day he was as ill as ever. He then began to have alternately good and bad days, so that I knew how I should find him before I reached the house. On his good days there was no pyrexia. On the bad ones the temperature might be up to 103°, was always high, and there was great thirst; but there was not so much drowsiness as before, the abdomen was not retracted, and the bowels were fairly regular. In spite of this the pain seemed even more acute, and his sharp sudden cries more shrill and piercing than ever. On Feb. 6th the patient had a particularly bad day; but this was followed by perfect immunity from pain for more than a week, till the 15th, when the symptoms returned, and until the 23rd resumed their tertian form. For the last three days he has been free from pain, is greatly wasted and very weak, but is very lively and cheerful considering what he has gone through. The treatment so far has been ice to head, absolute rest with sandbags, nourishing food, iodide of potassium, bromides, ammonia, and bark. Nothing local can be made out, but a hard, slightly enlarged state of the glands behind the sterno-mastoid.

I am, Sirs, yours faithfully,

February, 1888. PUZZLED.

"RAPID EMPTYING OF THE BLADDER."

To the Editors of THE LANCET.

SIRS,—Anent the letters published in your journal on Feb. 18th and March 10th on the sudden emptying of the bladder and the perturbations of the nervous system which not infrequently occur on the occasion, I desire to report a fatal issue to a female patient that occurred at 8.45 A.M. on the 17th inst. in my practice in this place. The death was almost immediately on her returning to bed after micturition. She was, however, very anæmic, and the catamenia had been suppressed for the previous six months. No pregnancy. The patient was seventeen years of age.

I am, Sir, yours faithfully,

Dovercourt, Essex, March 19th, 1888. AYNOTT J. J. CHITTY.

NEO-NEUROLOGY.

J. R. S.—The twofold transmission of sensory impressions and of motor impulses is a doctrine which, according to certain latter-day physiologists, science has inherited from antiquity—a doctrine which may be the natural corollary of the speculations of Greek and Alexandrine philosophers, but which, in the judgment of the physiologists referred to, must disappear before the findings of comparative embryology, and of a more intimate and thorough-going anatomy of the nervous system. That in the human organism sensibility is diffused and that sensation is immediate—such is the thesis of the "neo-neurologists," a school represented in Italy by Dr. Mario Panizza, whose work, "La Fisiologia del Sistema Nervoso ed i Fatti Psichici: con Figure intercalate nel Testo" (Rome, 1887), is now in its third edition. The author, an able and certainly a bold controversialist, claims to have revolutionised the teachings of physiologists, from Sir C. Bell and Prof. Claude Bernard to Drs. Hitzig and Ferrier. His positions, however, have not been allowed to pass unchallenged, some of them having been controverted by the late Prof. Luigi Luciani, of the University of Siena, whose papers, elaborated in conjunction with Prof. A. Tamburini, "Sui Centri Psico-Sensori Corticali," physiological and clinical, are among the best contributions made by Italy to neurological science.

J. B. H.—We do not think the publication of our correspondent's letter would be of any practical advantage. We shall not lose sight of the subject, but will, as hitherto, press the claims on the consideration of the authorities whenever occasion offers.

Dr. Percy Kidd.—Next week.

"A NEW METHOD OF TESTING THE REFRACTION OF THE EYE."

To the Editors of THE LANCET.

SIRS,—In reference to the letter of Mr. Adams Frost in THE LANCET of the 10th inst., in which he points out that in the new method of testing the refraction of the eye described by me the modification is so slight that the test is practically identical with Scheiner's, I may say at once that in the interpretation of the phenomena we are completely in accord. As to the practical identity of the two tests I think there is room for grave doubt. Mr. Adams Frost himself points out a great difference when he says that "in Scheiner's, two images of the object, occupying different positions, are seen simultaneously in ametropia; in this the image is seen first in one position and then in the other—in other words it appears to move." (Mr. Adams Frost when alluding to Scheiner's test might have said with greater accuracy, two images of the object occupying different positions are seen simultaneously when the distance at which the object is placed and the distance for which the eye is accommodated do not coincide.) It is this movement which is the essence of the test, and which enables it to be applied to the diagnosis of errors of refraction with such ease and accuracy. Mr. Adams Frost, moreover, omitted to point out that Scheiner's experiment is a test of accommodation, and not of refraction.

On careful examination and comparison it will, I think, be found that in the mode of application and results the tests are widely different. If Scheiner's test has frequently been applied as a test of refraction, and has never become a favourite, it presumably must have been because it did not sufficiently answer the requirements. There can be no doubt that the method recommended by me will be found to be of great value, and ought speedily to become a favourite for the following reasons. It does not require any skill or special training, and will enable the busy practitioner, who perhaps meets only a few refraction cases a year, to diagnose and correct cases of astigmatism with as great ease and accuracy as the specialist. The only objection to the test is, that it is a subjective one and liable to the error inherent in all subjective tests, and as such is not suitable in the case of children.

I am, Sirs, yours faithfully,

Hull and Sculcoates Dispensary, March 13th, 1888. A. LEGGE ROE.

ORIBASIUS.

J. C. A.—In Greek, ὀρειβάσιος, as its etymology implies, would mean "mountaineer"; but the *mot* of Prof. Freund of Strasburg, who assumed a Latin origin for the appellative (*os-oris*, mouth, and *basium*, kiss), and found in its fourth-century owner a namesake, if not an ancestor, of Dr. Kussmaul, was quite legitimate as a post-prandial pleasantry. The professor's incursion into the domain of philology will have served another, and a desirable, purpose if it attracts the more leisured of his brethren to the works of a physician who, great in his time as a consultant and a courtier, was still more eminent as a historian of medical science. The best edition of the writings of Oribasius (which excludes, however, Books 11–13, as being only a transcript from Dioscorides) is that of Bussemaker and Daremberg, in four volumes (Paris, 1851–62).

Brixton.—1. It is well to follow the custom that has prevailed in the locality.—2. The style on our correspondent's card is unobjectionable.—3. Parkes; Ringer; Meigs and Pepper, or a smaller book by Angel Money.

BENTON'S DIET CHART.

SOME four years ago we noticed with approval the introduction by Messrs. Wodderspoon and Co. of the diet charts which had been drawn up by Mr. S. Benton. In again calling attention to them we need add but little to our previous remarks. They are simply invaluable to the practitioner, who is enabled by their means to receive his daily report from the nurse substantiated by the record she has kept in his absence; and they serve to render sick nursing systematic and precise. There are many cases in which such a record is absolutely necessary for the welfare of the patient, and the diet chart greatly facilitates the uniformity and regularity of its being made.

Enquirer.—There are no precedents for such a case. We are unable to see how means can be forthcoming to pay medical practitioners where there are not the means of paying a resident medical officer. The only way will be to give the medical officers *honoraria*, and these should be as generous as the funds of the hospital admit of. Care should be taken, too, against the admission of unfit cases.

MEDICAL PRACTICE AT THE CAPE.

To the Editors of THE LANCET.

SIRS,—Would any of your readers give some information as to the prospects of a medical man going to the Cape of Good Hope? Would he be able to get anything to do professionally? Is there any better chance for a man in Canada or Australia—I mean, of course, for a man who has nothing but his work to depend on? I think that in these days of competition information on this subject is what is required by many in our profession. I am, Sirs, yours faithfully,

March 21st, 1888. OVER-COMPETITION.

TENOTOMY FOR PIANISTS.

To the Editors of THE LANCET.

SIRS,—In reply to the request made in your journal of to-day's date for references to the above subject, I would state that Section 572:6 of the Medical Digest (Appendix) refers to all the cases that have been reported, except those by Dr. Poore in the *British Medical Journal*, vol. i., 1887, pp. 444, 672. I am, Sirs, yours truly,

Boundary-rd., N.W., March 17th, 1888. RICHD. NEALE, M.D. Lond.

ERRATA.—In our Liverpool letter last week, page 547, the name of the medical officer of health for West Derby was wrongly printed "Clarke." It should, of course, have been Dr. William Carter.—In our notice of the Ayrshire Medical Club last week, page 551, the name of the vice-president should have been stated as Dr. W. (not J. H.) Alexander.

COMMUNICATIONS not noticed in our present number will receive attention in our next.

COMMUNICATIONS, LETTERS, &c., have been received from—Dr. Herman, London; Mr. Haslam, Birmingham; Dr. R. Neale, London; Mr. L. Humphry, Cambridge; Dr. J. S. Cameron, Huddersfield; Mr. Wheeler, London; Mr. T. Simpson; Mr. Skrimshire; Mr. Johnson, Liverpool; Mr. Collyns, London; Mr. H. Williams, London; Messrs. Lynch and Co., London; Surg.-Major Doble, Bellary; Messrs. Giles, Schacht, and Co., Clifton; Mr. W. Brown, Carlisle; Mr. Bridger, London; Dr. Hale White, London; Mr. Southam, Manchester; Mr. F. C. Wood, Sheriff Hutton; Dr. Campbell, Murthly; Mr. Coombs, Parbold; Dr. Robert Bell, Glasgow; Dr. Wiglesworth, Rainhill; Mr. J. Colston, New Whittington; Dr. Willey, Sheffield; Mr. J. Hopkins; Messrs. Blake and Co., Leeds; Dr. C. H. Martin, Mobile; Messrs. Burroughs and Wellcome, London; Mr. W. A. Lane, London; Messrs. Truelove and Shirley, London; Dr. Hurry, Reading; Dr. McCaw, Belfast; Mr. Van Buren, London; Mr. Humphreys, London; Mr. W. Smith; Dr. Swift Walker, Hanley; Mr. Wilkinson, Stoke-on-Trent; Messrs. Dewar and Sons, Perth; Dr. Bernard, London; Mr. J. Oliphant; Mr. Nelson Jones, Swansea; Mr. A. Lingard, London; Surgeon-General Maclean; Dr. F. C. Bury, Manchester; Mr. J. Stewart, Clifton; Mr. Haviland, Douglas; Mr. F. C. Turner, London; Dr. J. Adam, London; Mr. R. Boyle, London; Dr. Herringham, London; Mr. G. G. Hamilton, Liverpool; Mr. H. R. Davies, Lenham; Mr. Chitty, Dovercourt; Dr. A. Lindsay, Bursiem; Mr. C. B. Bell, Exeter; Mr. H. H. Mason, Fulham; Mr. Finucane, Brentford; Mr. R. W. Parker, London; Mr. J. S. Hooker, Hastings; Mr. Garnham, Ripley; Mr. Wallis; Mr. Sladden, London; Dr. Pryce, Nottingham; Mr. Brown, Leeds; Mr. Barrett, Cambs.; Mr. Fuge, Taunton; Mr. Keay, Eastbourne; Mr. Rowland, Richmond; Mr. Rye, Cannes; Dr. Jacland, Edinburgh; Mr. Russell, Liverpool; Mr. Merson, Witterby; Mr. Tunmer, Harrogate; Eros; J. C.; M.D., Cantab.; School of Massage, London; A Lover of Fair Play; Quercus; Brixton; C. H. S., London; Maltine Manufacturing Company, London; G. F., Folkestone; A. B. M., London; An Old Assistant; Tasmania, London; Doctor, London; A Subscriber; M.D., London; Over-competition; An Old Subscriber.

LETTERS, *each with enclosure*, are also acknowledged from—Major Pead, Dulwich; Mr. Dawson, Bath; Mr. Findlater, Norwich; Messrs. Sang and Barker, Edinburgh; Mr. Gilderdale, Wakefield; Mr. Parry, North Wales; Dr. Day, London; Mr. Rowlands, Towyn; Messrs. Tayler and Son, London; Mr. Gadsby, Derby; Mr. Clouting; Mr. Henry, New Zealand; Mr. Ward, London; Mr. Will, London; Messrs. Tomson and Son, Luton; Dr. Akerman, Salisbury; Mr. McKennell, Dalbeattie; Mr. Coombe, Southport; Mr. Blackstone, Bradford; Dr. Walker, Forfar; Mr. Bully, Hastings; Dr. Gilbert, Snodland; Mr. Ragar, Stourbridge; Mr. Taylor, Norfolk; Mr. Rochfort, Frankfort; Miss Every, Monsall; Mr. Hewer, London; Mr. Dawson, Skipton; Dr. Johnston, Sheffield; Mr. Harding, Loughborough; Dr. Reid, Dorset; Mr. John, Haverfordwest; Dr. Waters, Liverpool; Messrs. Tillotson, Bolton; Mr. Morton, Wisbeach; Mr. Silverlock, London; Mr. Slatter, Nottingham; Mr. Sacker, London; Mr. Hodgson, London; Mr. Farrar, London; Mr. Lister, Burnley; Mr. Brooks, Berks; Mr. Wormald, Manchester; Mr. Greenwood, Liverpool; Mrs. Hitch, St. Leonards; Mr. Newman, Windermere; Mr. Heywood, Manchester; Brown, Leeds; Medicus, London; Hilda, Yorks; A. B. C., London; X., London; The Bristol Royal Infirmary; Medicus, York; X. T., London; St. Asaph Union; R. H. B., London; M. O. H., London; The Jarvis-Conklin Mortgage Trust Company, London; M., London; The Royal Albert Asylum, Lancaster; Alpha, Plymouth; N. B., Ripley; The Fever Hospital, Leeds; Rex, London; Elmhill Home, Aberdeen; Deaconess Elsie, London; M.D., Harris; Medicus, Hatcham; The East Suffolk Hospital; Glette, London; D. W., London; B. W., Cambridge; Lady Superintendent, Brighton; Dr. Y. N. N., London; Medicus, Blackburn; D., London; W. E. J., London.

Wigan Observer, Dorset County Chronicle, Leicester Daily Post, Windsor and Eton Express, The Lakes Chronicle, Dundee Advertiser, Birmingham Daily Mail, Bombay Gazette Budget, Bristol Mercury, Midland Free Press, Surrey Advertiser, Harrogate Advertiser, Times of India, Devon and Exeter Daily Gazette, Western Daily Press, Alfreton and Belper Journal, The Telegram, Huddersfield Daily Examiner, Advocate of India, &c., have been received.

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